IBM Service Corps

Romania 8

Integrating Digital Transformation into Bucharest's School Counseling System

Client: CMBRAE

November 6th, 2019

IBM Service Corps

Agenda

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The IBM Service Corps' Triple Benefit Impact

For more than ten years, the IBM Service Corps has given its most talented employees the chance to help communities around the world tackle complex problems. Through its unique design, the IBM Service Corps program delivers a triple benefit.



The IBM Service Corps Experience reflects the IBM Values

Pre-work:
Dedication to every client's success

Deployment:
Innovation that matters, for our company and for the world

Post Service:
Trust and personal responsibility in all relationships

Develop a unique set of skills and show deep personal commitment

- 20 hours of education, completed virtually
- Team building and skills development
- Established curriculum



Deploy innovation to address critical societal needs

- Work at the intersection of business, technology and society
- Immersion in local culture
- Use social media to share experiences

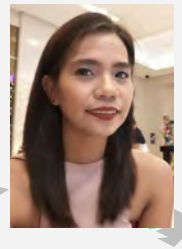


Share expertise, restlessly reinvent and show personal interest

- Results and great value to our business
- Global/cross-cultural teamwork
- Sharing news skills



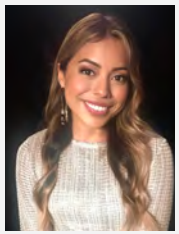
The Team



Marinelle Briones,
Philippines



Seiya Katoh,
Japan



Jennifer Gonzalez,
Texas, USA



Ari Pratiwi,
Indonesia

Executive Summary

CMBRAE has limited resources, expertise, and knowledge to come up with sustainable long-term strategy and vision for counselors to better to provide their services.

In addition, there is a resistance in shifting the paradigm on the current educational and counseling system.

Project Objective

- Provide recommendations that can be implemented by CMBRAE to tackle the primary pain points of Bucharest school counselors in the current education system.
- The recommendations would be focused on introducing digital transformation methods into the counseling framework

Project Deliverables

- Revised Scope of Work
- Deliver three Design Thinking Workshops to create personas (1) counselors, (2) teachers (3) students. The clients will be certified so they are able to replicate this practice
- Develop a high-level roadmap to digital transformation that will improve how counselors do work

Anticipated Host Organization Change Resulting from Deliverables and Project Impact

The 3-phase recommendations towards digital transformation of school counseling services will result to the improvement of the counseling services provided to the students, thus improving their overall psychological, emotional, and social life.

In addition, the counselors could be given with an easier approach to career counseling that could be easily matched to the job demands of the market. Lastly, it would increase the eminence of counseling not only as a profession but most importantly, as a vocation.

Centrul Municipiului Bucuresti de Resurse si Asistenta Educationala (CMBRAE)

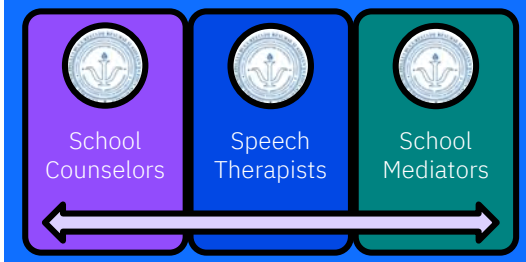
A public educational institution under the Ministry of Education in Romania.

An educational institution providing counseling (educational, career-counseling, psycho-pedagogical assistance) to all schools in Bucharest.

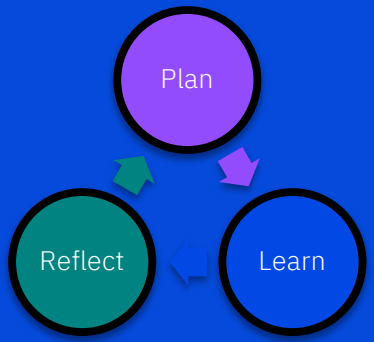
The responsibilities' of these Centers- to coordinate, monitor and evaluate the activity of:

- the county/regional psycho-pedagogical assistance offices
- the speech therapy Centre's
- school Centre's for inclusive education and specialized services of school mediation

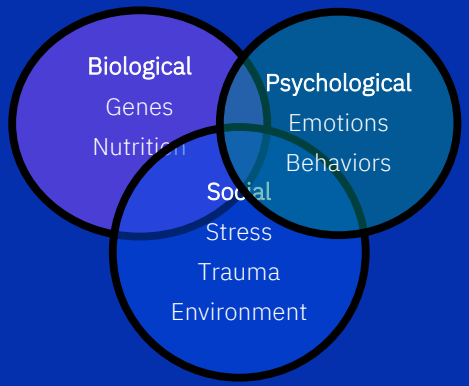
To include and sustain in the compulsory education system all the children, concerning their psycho-individual and social characteristics



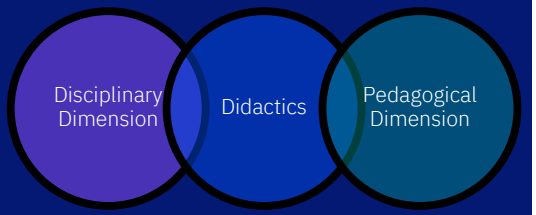
to provide psycho-pedagogical assistance in learning for children



to support the quality based education for all the children, focused on the bio-psycho-social potential of each child



to improve the didactic and educational activity of the teachers



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Project Objective



- Provide recommendations that can be implemented by CMBRAE to tackle the primary pain points of Bucharest school counselors in the current education system.
- The recommendations would be focused on introducing digital transformation methods into the counseling framework

Project Deliverables

1. Revised Scope of Work – please refer to Appendix I

2. a. Deliver three Design Thinking Workshops to create personas (1) counselors, (2) teachers (3) students – please refer to Appendix II

2.b the clients will be certified so they are able to replicate this practice.
(each participant will get emails from acclaim system IBM badge notification)

3. Develop a high-level roadmap to digital transformation that will improve how counselors do work.

This will allow the clients the opportunity to provide higher-quality career mentorship and guidance specific to the following:

A. Psycho, social, mental, and emotional aspects
B. Training and enablement (professional, digital, career management skills, user experience design)
C. Mock-ups of how this could be applied
D. List of functional requirements
E. List of non-functional requirements
F. Architecture diagram

- -- Please refer to Appendix III

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Methodology and Plan

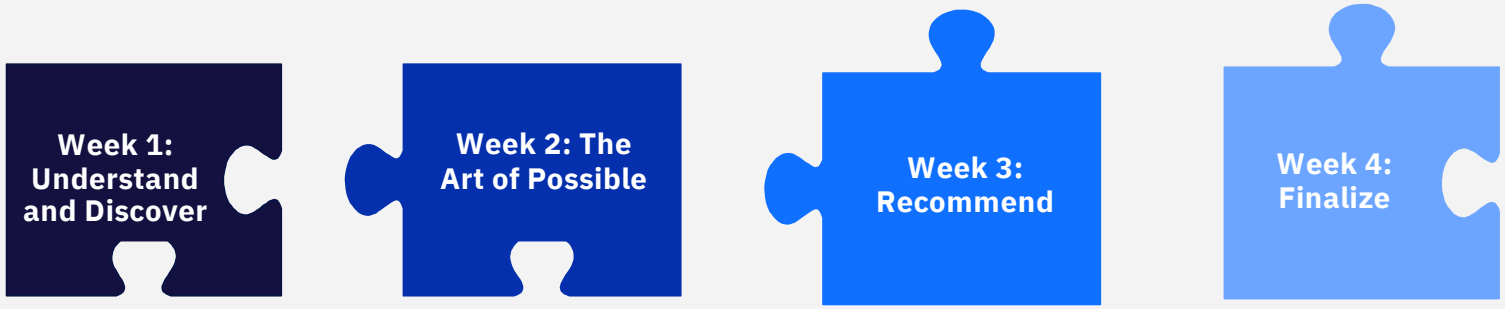
The approach used by the team focused on 4 parts, some of the activity highlights were the following:

- 1:1 interviews with the counselors, teachers, and students
- Design Thinking for counselors, students and teachers
- Researched on the related literature that would support our recommendations
- Recommendations divided into short-term, medium term and long term recommendations



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Steps involved in the method that was used



	Week 1: Understand and Discover	Week 2: The Art of Possible	Week 3: Recommend	Week 4: Finalize
Step 1	• Met with the host organization	• Reviewed and got the sign-off of the revised SOW	• Analysis of the To-be state of the client	• Finalize and wrap-up of the recommendations
Step 2	• Understand the organization's current situation, pain points, challenges and strengths	• Completed the 1:1 interviews and conducted Design Thinking for Counselors, Students and Teachers	• Studied the impacts of the recommendations based on short-term, medium-term and long-term	• Review of the completion of the deliverables
Step 3	• Relied on existing team expertise and knowledge of industry best practices	• Researched on related literature to support the data from the Design Thinking Workshops. • Performed cross-functional brainstorming and gap analysis	• Review of the functional, non-functional requirements, architectural overview, integration, design of the application	• Present to the client the recommendations for the future support and sustainability of the project

Anticipated Project Impact- Current State

Interviews/Design Thinking conducted	Findings	
Students 23 middle school and high school students 2 schools in Bucharest	•Students feel they do not have time for themselves •Many students have needs for support such as family problems, and their path. •Majority of the students have smart phones •Students are more comfortable sharing their problems to their peers than parents as parents are too busy. •Some students have negative image towards counseling	
Teachers 7 teachers from 2 different schools in Bucharest	•Lack of training materials to for professional development •Lack of logistics and available resources •Too many hours spent in teaching & preparations •Lack of skill and knowledge to listen and respond to student's personal issues •Limited support from parents on school activities	
Counselors 30 counselors from different schools in Bucharest	•Too many things to be done •Wide range of issues (psychological, path, family, friends) •Lack of counselors per student (ratio as high as 1:2600) •Counselors cannot manage their time and resources •Lack of online tools to make the counselors more efficient •Limited place and opportunity to share and consult their counseling activities/needs	

Anticipated Host Changes Resulting from Deliverables

The sustainable roadmap to digital transformation that will enable CMBRAE and counselors to provide better counseling services for students and teachers.

Phase I: Quick Wins

Programs that could easily be implemented without the use of technology by the counselors across schools in Bucharest

- Implementation of buddy program for students and counselors/teachers will reduce workload of counselors by 10%
- Improve satisfaction level of students to the services provided by their teachers and counselors by 10%

Phase II: Accelerated quick wins and enablement programs

Programs that would help or aide in the transition of the stakeholders to the application and the introduction of the technological foundation required for sustainability

- Success stories and student/counselor profiles, Counselors will be able to get recommendations for specific situations. This will improve quality of counseling and reduce time for counseling.
- Availability of the training materials for teachers and counselors
- Technology Resources required in the Collaboration Room and e-Learning platforms

Phase III: Mobile application proposal and implementation

Detailed design proposal of the solution and guidance on future implementation

- Online counseling to bring down communication barriers with students
- Focus on key functionalities expected by personas and backed by research
- Integration of existing internal and external processes / systems
- Introduce analytics that support multiple data sources to improve counseling and support personalization
- Future opportunities to implement chatbot and reward program for additional expansion.

“In Romania, we are always in a rush hour. It was a good opportunity for us to stop and think strategically.”

Florea Robert Florin, Coordinator, CMBRAE



In IBM, newly hired employees are matched with experienced employees and create what is called ”tribes” where more experienced employee will provide advice to support newly hired to improve their skills.

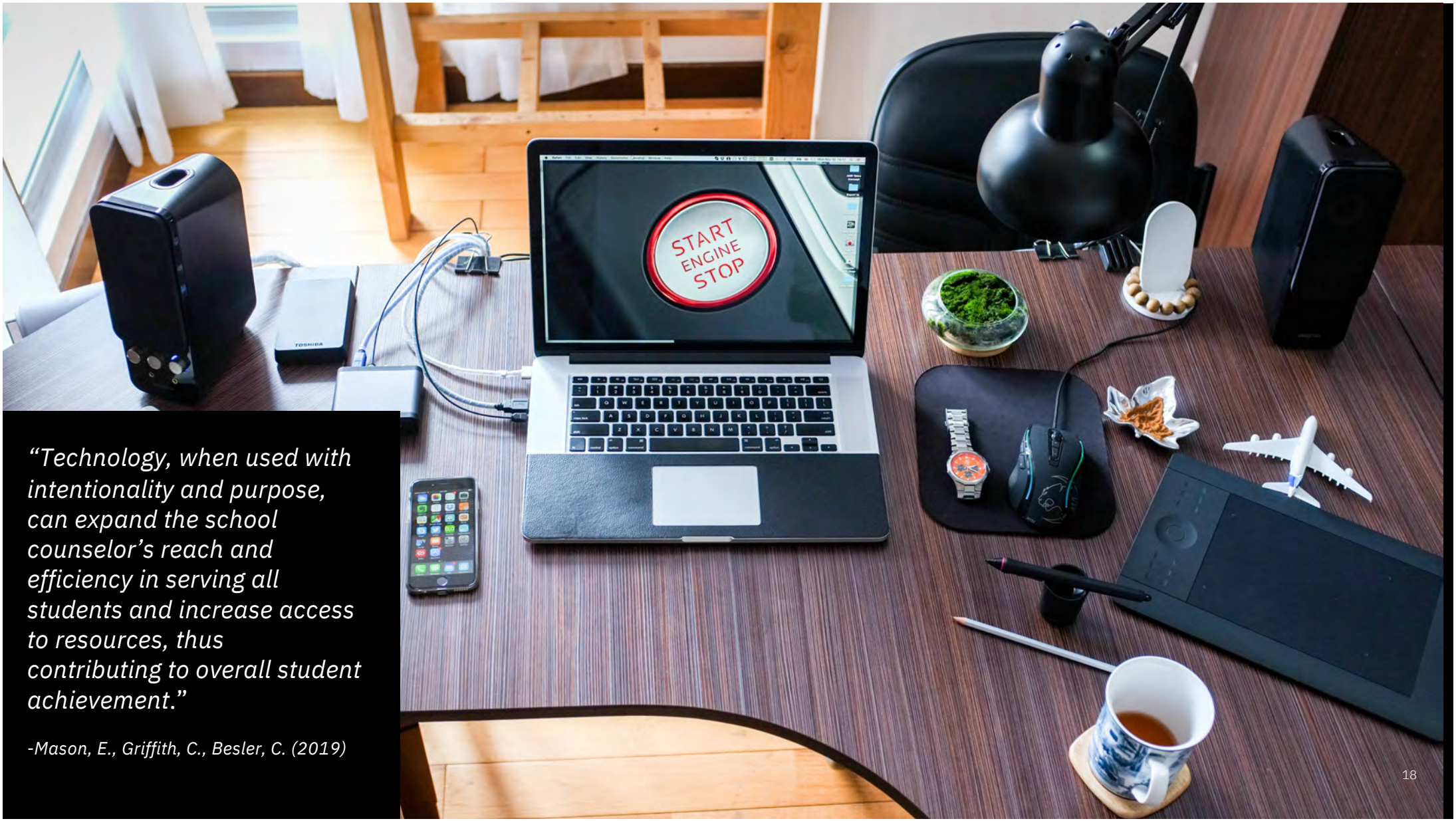
Buddy programs are also applied in multiple Universities in the U.S. for international students.
(eg. University of Texas at Austin, American University, etc)



Short Term Recommendations

Recommendation	Key Findings	Value
Buddy Program	• Students have limited access and time to meet with counselors. • Older students have gone through certain issues that younger students have not experienced yet. • Counselors and teachers need to work on their own based on their experience and capabilities, and limited chance to share their experience and issues they are facing. • Way to share of counseling case studies and skills is wanted. • ways to promote the programs by means such as ”campaigns” are needed	“Big Brother /Sister Program” to match Students as ”buddies”. The Older students provide support as mentor to buddy students. “Teacher/ Counselor Buddy Program” to match teachers / counselors as “buddies”. Buddy teacher and/or buddy counselor would provide advice and support to peers. goal is to get as much participation as possible. The first step could be an event or a panel inviting alumni students or selected students to talk about his/her experiences/stories.

**Parental consent required plus student adviser screening*

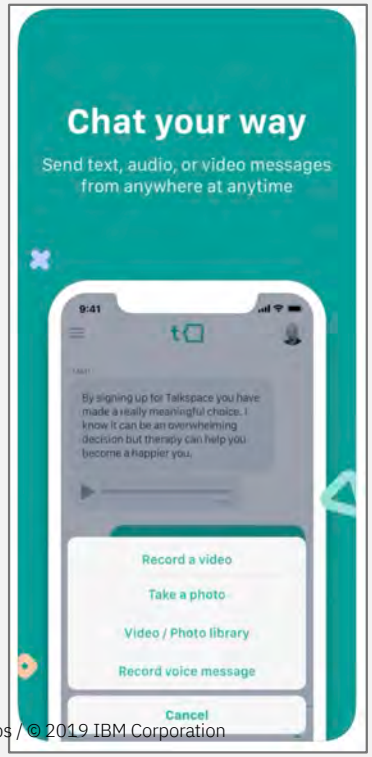


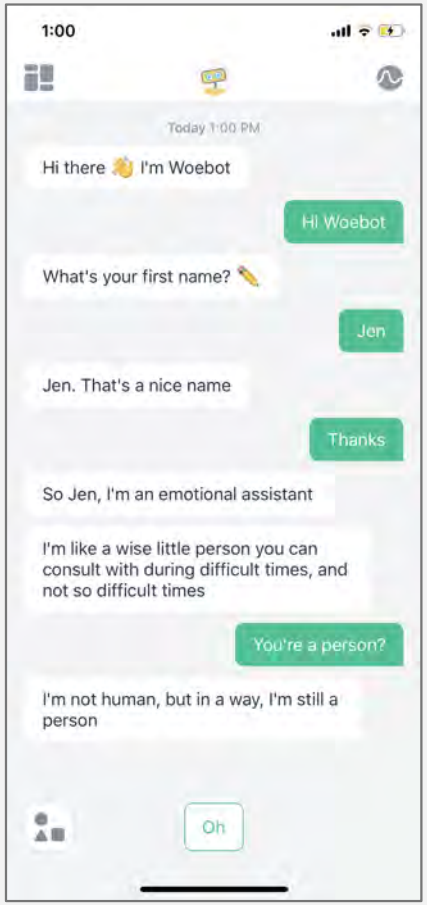
“Technology, when used with intentionality and purpose, can expand the school counselor’s reach and efficiency in serving all students and increase access to resources, thus contributing to overall student achievement.”

-Mason, E., Griffith, C., Besler, C. (2019)

Existing counseling application platforms

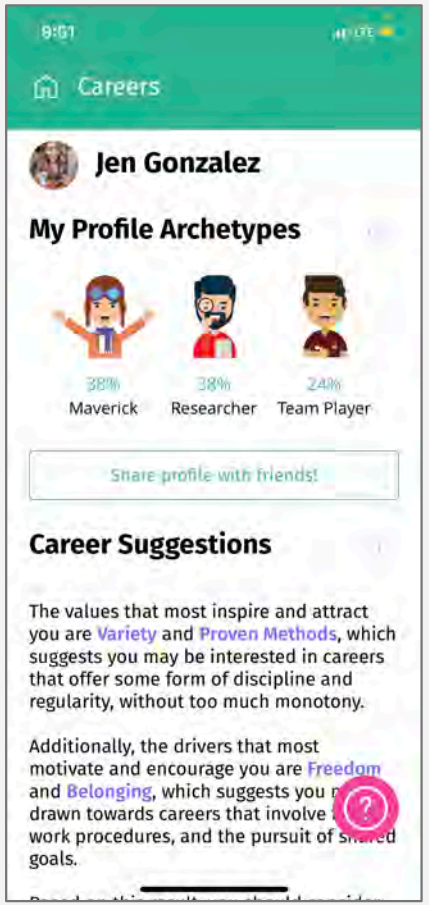
What if there was an application that made it easier to connect with students to provide a secure and better experience?



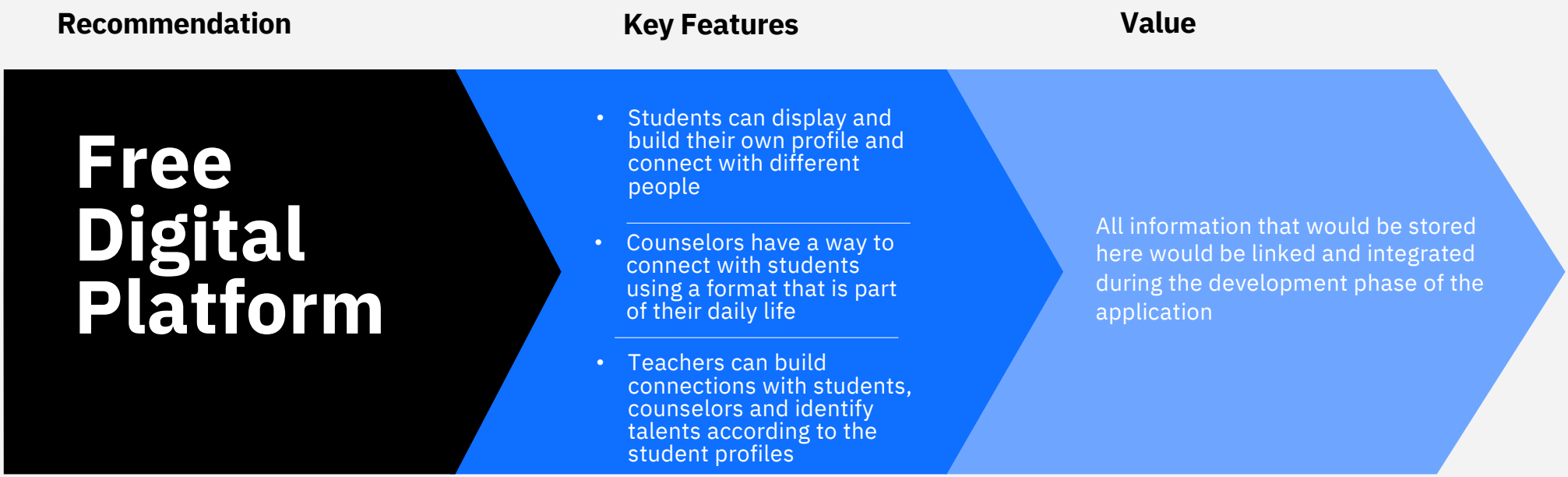


Or an AI-powered chat bot that recognizes psychological and behavioral characteristics of a child that will be accessible to counselors?

Powered with a smart questionnaire to help students identify potential career opportunities allows them to create a more personalized profile.



Medium Term Recommendations



**All contents will managed by the client*

Collaboration Room

- Networking tool for students seeking higher education
- Whether you are a student, counselor, teacher, coach or student administrator – you can create your profile, explore opportunities, and connect with like-minded people
- Platform that could showcase the student's profile and let them connect with different members (i.e. counselors, teachers, admissions, coaches etc.)
- Allows the person to tell his/her story through a multimedia profile

BUILD YOUR BRAND

Personalized Profile- upload profile picture, background image and write short bio

Share Experiences – you could share personal stories that could demonstrate what you have done in your roles

STAY ORGANIZED

Upload Media- save audio, video and picture files

Receive reminders- get notified about important dates and/or appointments

Make your Mark- You may post papers, presentations and case studies

GET CONNECTED

Collect Endorsements - share references from employers, coaches and others who can speak to the quality of your work and your character

Broaden your Support Networks- build and deepen connections with teachers, mentors and counselors who can advise you along the way

Explore and Learn- search for schools that match your needs and interests and reach out to admissions officers, professors and coaches

Students Profile Page

Features that the students could use in their page



Custom design profile



Add Music Files



Add Transcripts



Add Photos



Add extracurricular activities



Write Essays



Add Videos



Add Multiple Test Scores

Counselors Profile Page

Features that the counselors could use in their page



Access on any device



Invite your students



Message connected students



Customized profile



Use connected student profile



Online invoicing



Promote yourself



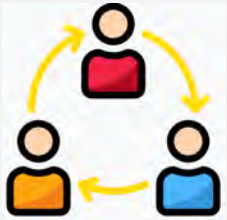
Nudge connected students



Share student profile with your network

Counselors Profile Page

Features that the counselors could use in their page



Develop your own network



Emoji Library



Send attachments



Send photos



Assign To Do student tasks with deadlines



Calendar with deadlines

Teachers Profile Page

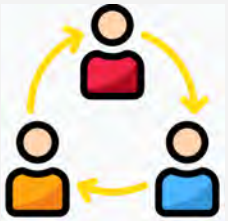
Features that the counselors could use in their page



Access on any device



Use connected student profile



Develop your own network



Customized profile



Nudge connected students



Share student profile with your network



Student search



Message connected students



Reminders sent to students following you or your school

“Students who have greater access to trained school counselors and comprehensive school counseling programs are more likely to succeed academically and behaviorally in school”

Wilkerson, K., Perusse, R., & Hughes, A. (2013)

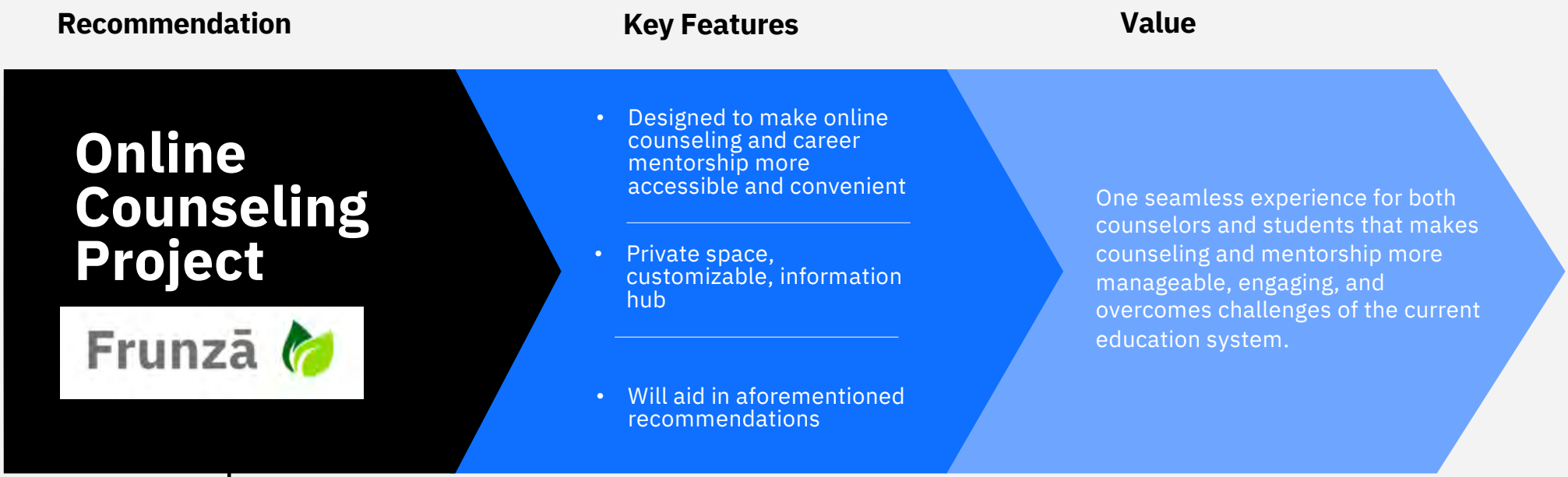


Medium Term Recommendations

Recommendation	Key Features	Value
Training and Development Framework for Teachers and Counselors	• Gamification and point system of training for the counselors and teachers • Integration and use of the available e-learning platform (edu.ro) for materials • Focus on digital training for both teachers and counselors	• The training process and framework for the counselors and teachers would be done simultaneously for them to utilize the existing application and how they can contribute to the development phase of the long term application in the future.

**Please see Appendix III for the detailed training framework*

Long Term Recommendation

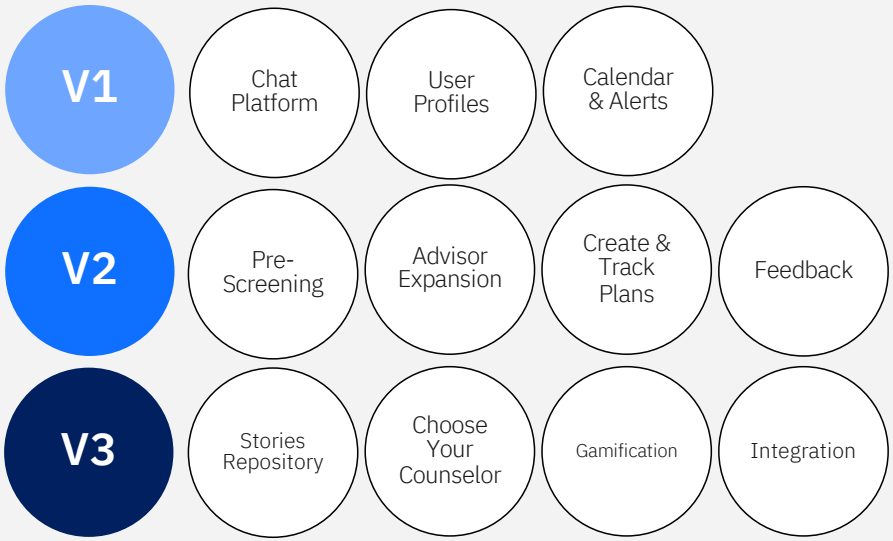


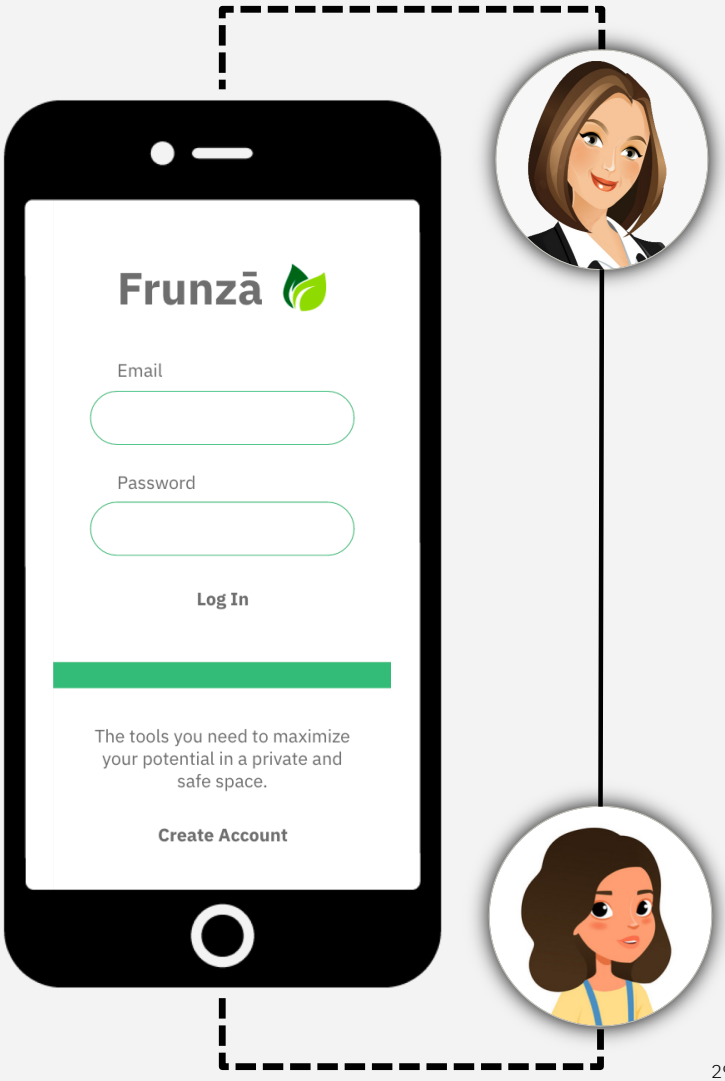
In this deck, you'll find the **high-level roadmap to digital transformation**. Note that this application is not meant to replace face-to-face engagement, but rather an alternative way for students to overcome day-to-day challenges in a stigma-free environment.

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Application Features

Develop in iterations for quick stand-up time and iterate based on performance insights. In order to ensure success, this needs to have a strong architectural framework.





Version 1.0

Chat Platform to Deliver Online Therapy

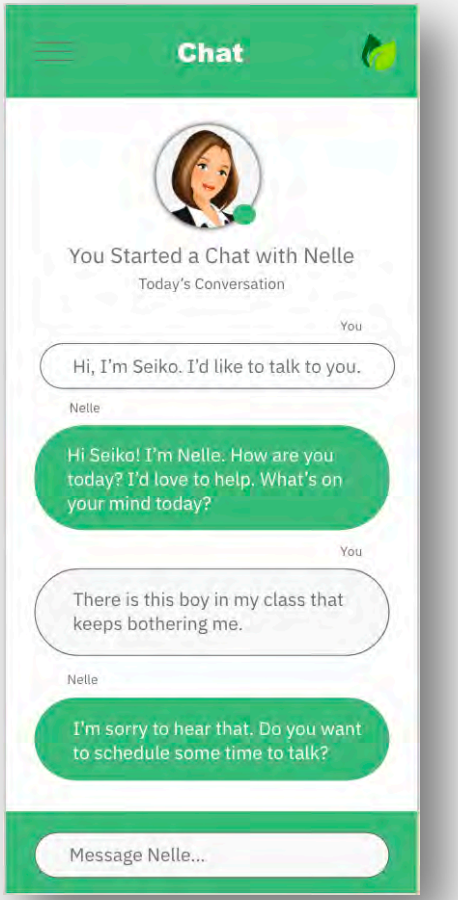
Users can engage in private digital conversations or set up appointments to quickly access mental health and career counseling services.

Benefits:

- Convenience
- Discretion
- Accessibility
- Confidentiality

An online study found that cognitive behavioral therapy online effectively reduces mental illness symptoms. In some cases, it is even more effective than in-person therapy.

Canadian Medical Association Journal



Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | Create & Track Plans | Feedback | Stories Repository | Choose Your Counselor | Integration | Gamification

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Version 1.0

User Profiles & Portals

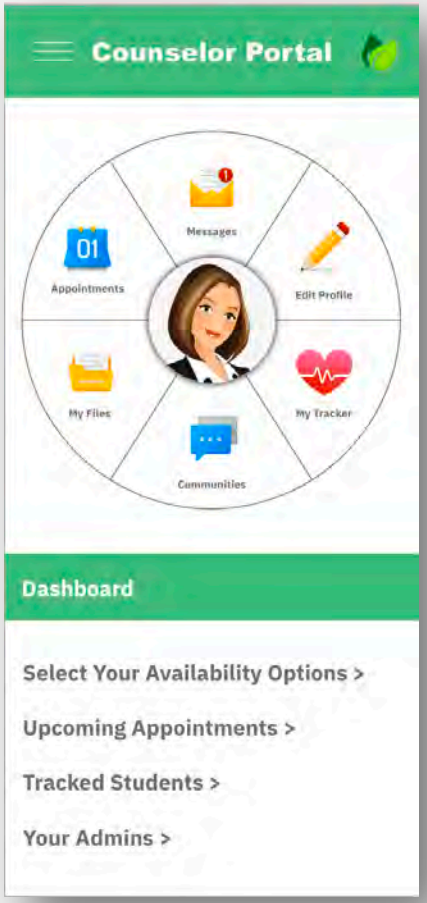
Each user will have his/her own customizable portal that highlight certain features depending on the type of user account.

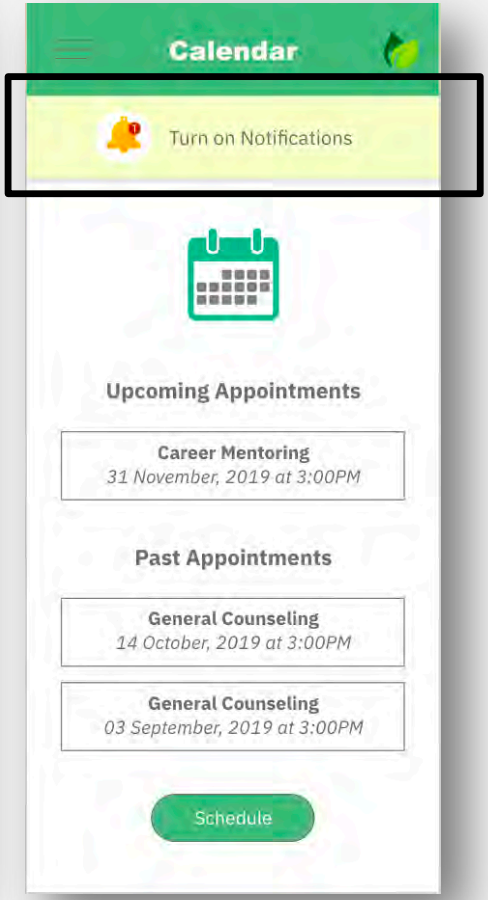
Users can create personal profiles to store basic information and personal details.

- Helps humanize the app and aid in relationship building

Calendar & Alerts

A calendar and push notifications will help better organize the calendar, increase user retention, and a building block for personalization.





Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | Create & Track Plans | Feedback | Stories Repository | Choose Your Counselor | Integration | Gamification

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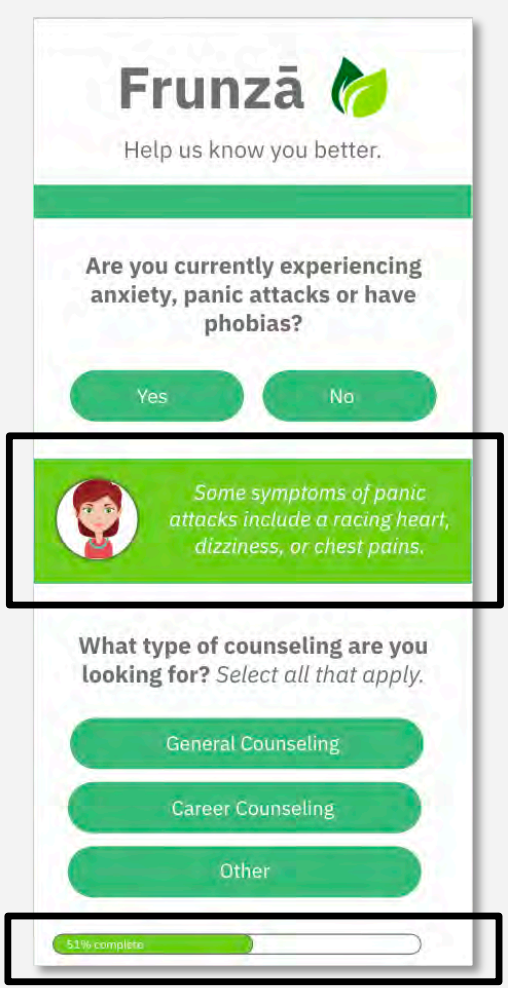
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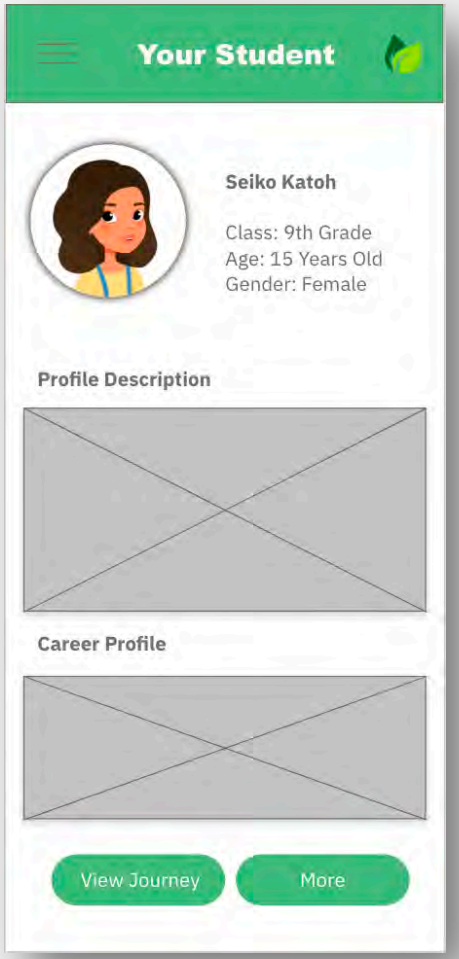
Pre-Screening

Quickly build a student profile for the counselor by creating a pre-screening questionnaire for an at-a-glance view.

Suggestions:

- Embed supporting quotes and artifacts to ensure understanding and encourage honesty
- Ideally a 10-minute assessment to motivate completion rate





Chat Platform | User Profiles | Calendar & Alerts | **Pre-Screening** | Advisor Expansion | Create & Track Plans | Feedback | Stories Repository | Choose Your Counselor | Integration | Gamification

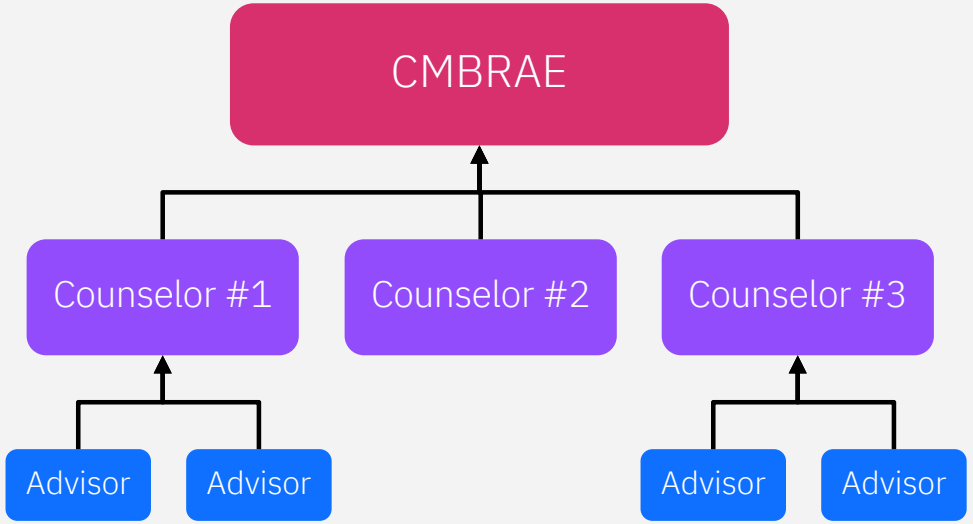
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Version 2.0

Advisor Expansion

Counselors can assign Teachers, Student Advisors, and other personnel as secondary application administrators to be able to benefit from certain functions.

- Primary Admins will have the ability to see all Secondary Admin interactions to ensure quality
- There should be a CMBRAE focal at the top of the administration web
- Will allow others to also serve as ”counsel” for the students



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Version 2.0

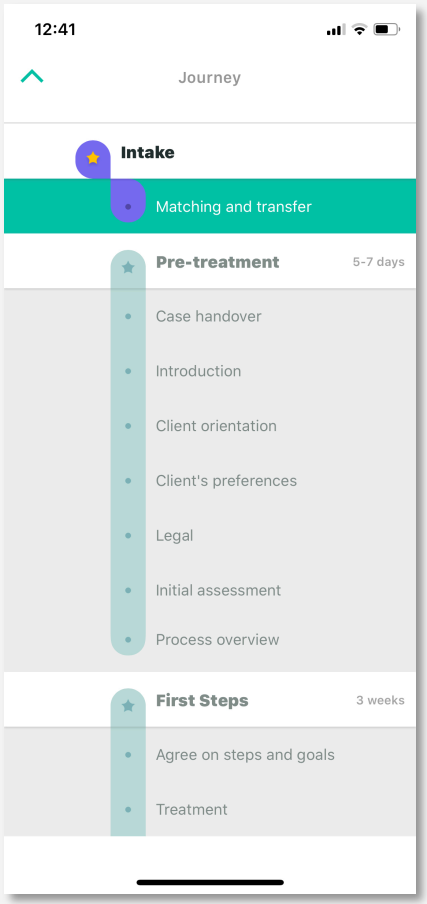
Create & Track Plans

Create, manage and track action plans per student and store sensitive information.

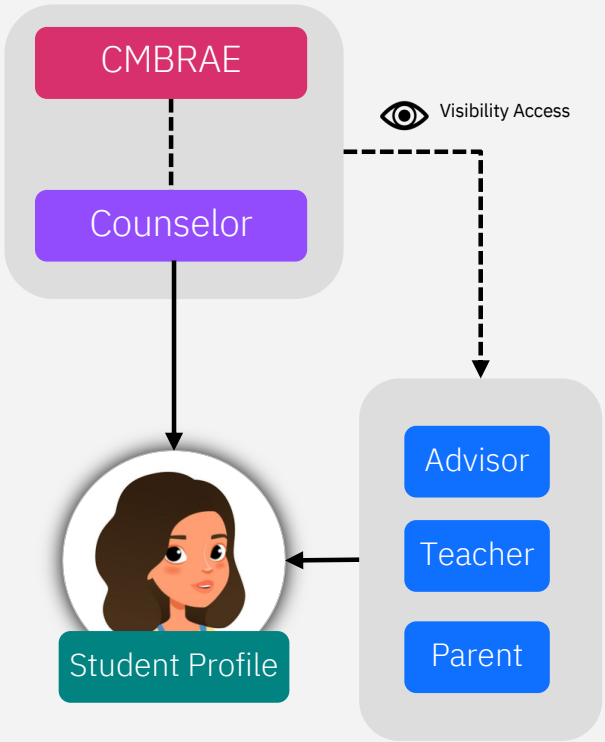
- Plans can be setup unique to situation (e.g. career mentorship, depression, etc.)
- Plans can also serve as guidance for teachers and advisors

Note: Only the designated school counselor of the student can create, access, and share action plans

Talkspace



Information Accessibility



Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | **Create & Track Plans** | Feedback | Stories Repository | Choose Your Counselor | Integration | Gamification

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Version 2.0

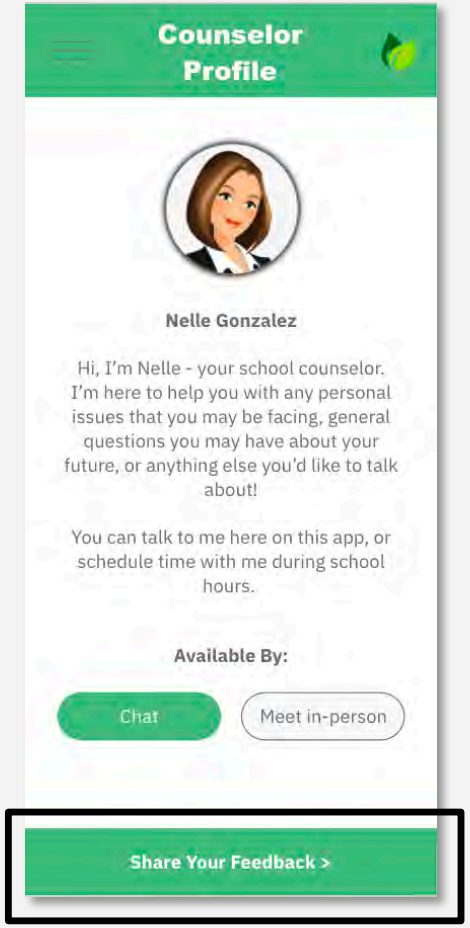
Feedback Loop

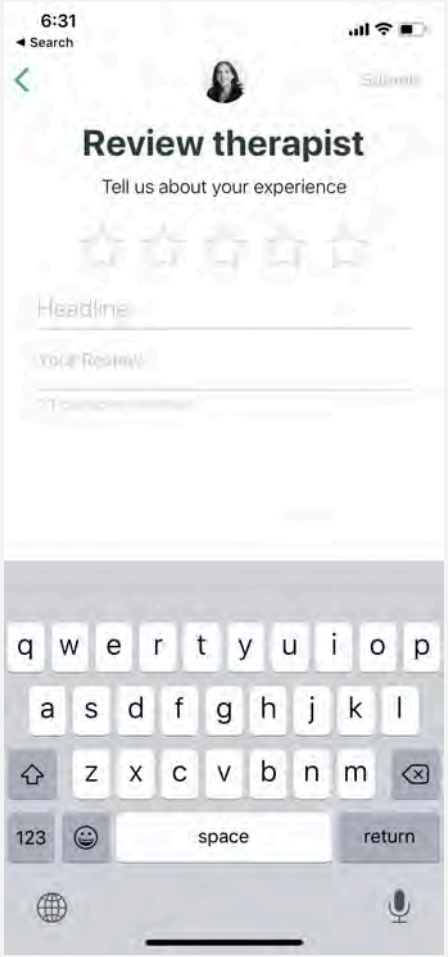
Setup a feedback loop to improve counseling and digital experience;

1. Feedback on counselor/advisor services
2. Feedback on application

Suggestions:

- Determine the objective - primary KPI's
- Make it short, sweet & concise
- Create unique feedback forms for different touchpoints
- Start rating should not be visible to students





Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | Create & Track Plans | **Feedback** | Stories Repository | Choose Your Counselor | Integration | Gamification

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Version 3.0

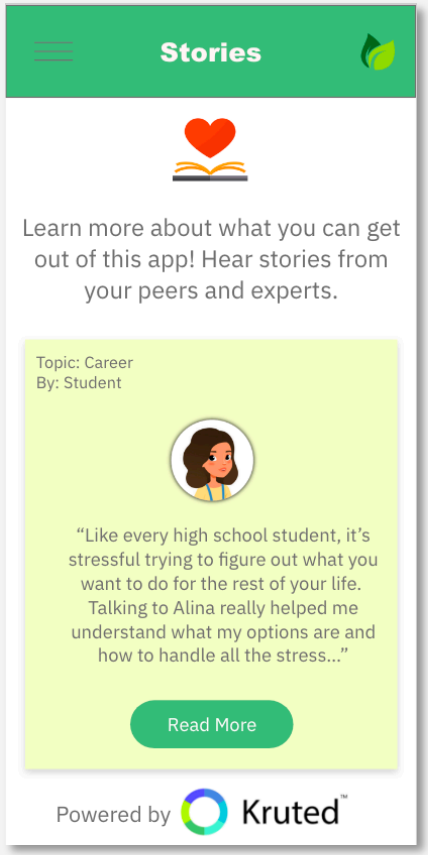
Stories Repository

Create a collection of quality content/stories from students and other users. A collection of personal stories from other students and admins.

Suggestions:

- Use in content hub on a different platform such as Kruted to avoid starting from scratch
- Provide both anecdotes and informative content to normalize scenarios and reach understanding

Why? *Storytelling is a powerful tool used to inspire, connect and create change in people.*





Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | Create & Track Plans | Feedback | **Stories Repository** | Choose Your Counselor | Integration | Gamification

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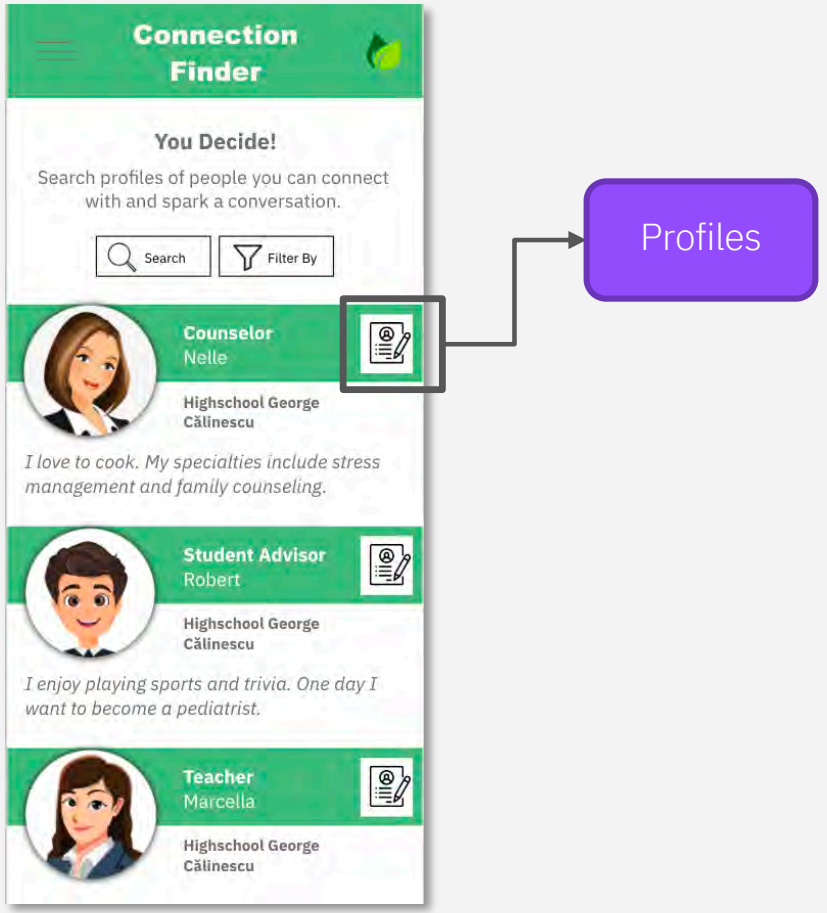
Version 3.0

Choose Your Counselor

Give students the option to choose their own advisors based on their own criteria. This will improve the quality of services to student needs.

Suggestions:

- Power with the ability to chat or schedule face-to-face time depending on availability
- Filtering capability to allow for the best pairing of need to expertise (e.g. gender, counsel type, etc.)



Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | Create & Track Plans | Feedback | Stories Repository | **Choose Your Counselor** | Integration | Gamification

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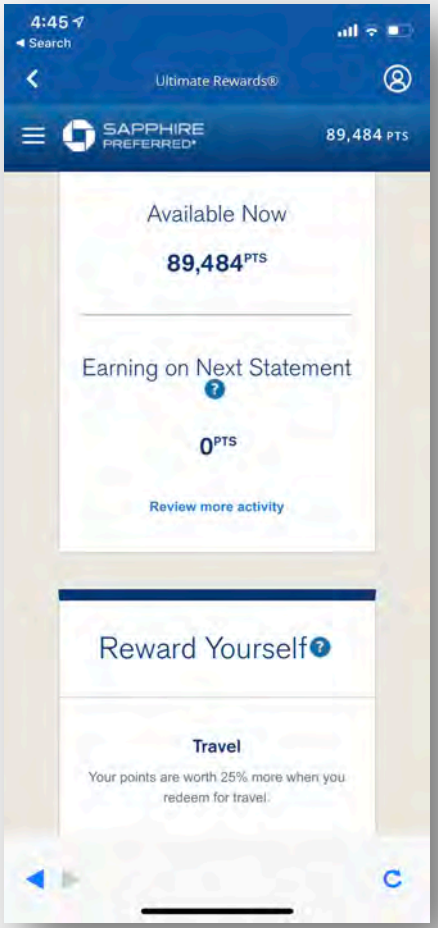
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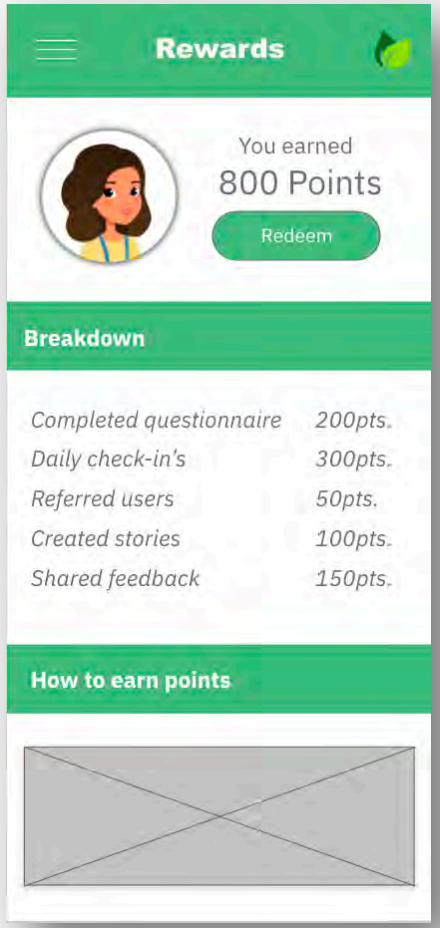
Gamification

Once you have a decent amount of users, begin introducing the theory of gamification into the application. This can quickly be done by creating a point / reward system to award and encourage positive behavior.

Suggestions:

- Award participation
- Enable a referral program to increase registration rate
- Make points redeemable





Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | Create & Track Plans | Feedback | Stories Repository | Choose Your Counselor | Gamification | Integration

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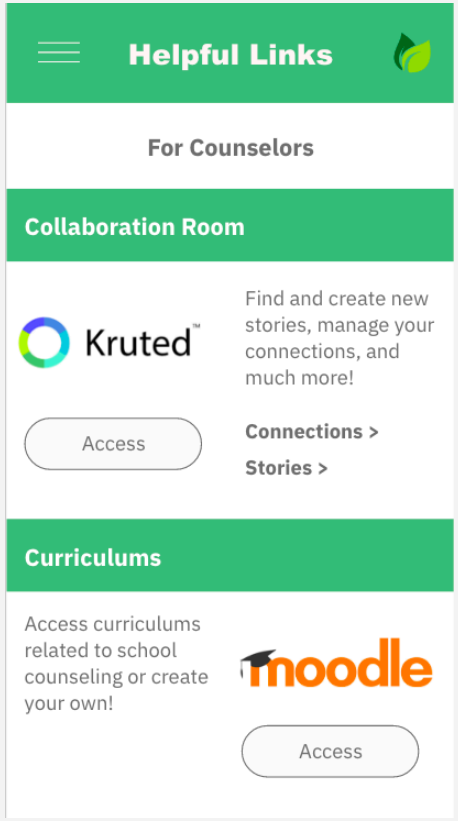
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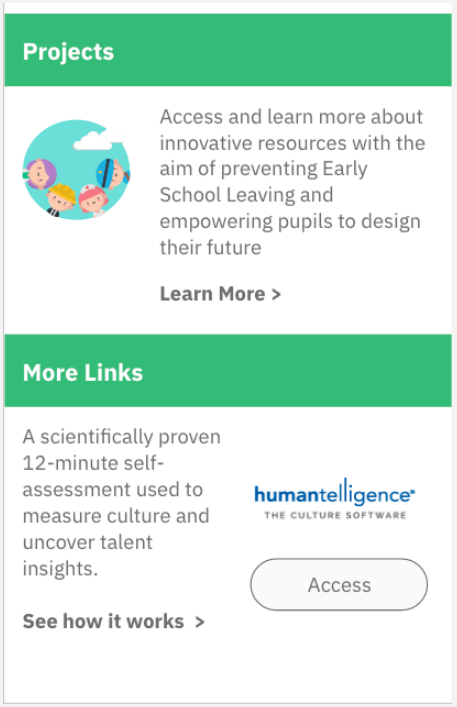
Integration

By this point, begin thinking about how to integrate existing internal & external systems and content to streamline the counseling experience. This gives users the option to see the most important information on-hand.

Suggestions:

- Direct users or use APIs to pull data from third-party sites & applications (e.g. news and announcements)
- Focus on Moodle to access curriculum and AMN.ro to support existing aptitude test





Chat Platform | User Profiles | Calendar & Alerts | Pre-Screening | Advisor Expansion | Create & Track Plans | Feedback | Stories Repository | Choose Your Counselor | Gamification | Integration

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System Context Use Cases

“Design is a plan for arranging
elements in such a way as best to accomplish a particular purpose.”

Charles Eames
The Information Machine, 1964



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System Context Diagram (Future State)



Students

Daily activities, basic personal information



Teacher

Student observations

School IT system

Student information related to school and grades

CMBRAE Integrated Digital Learning Platform

Counselor's observations and advices



Counselors

Result of eLearning

www. ReteaEDU.ro

Performance of counselors; training request list



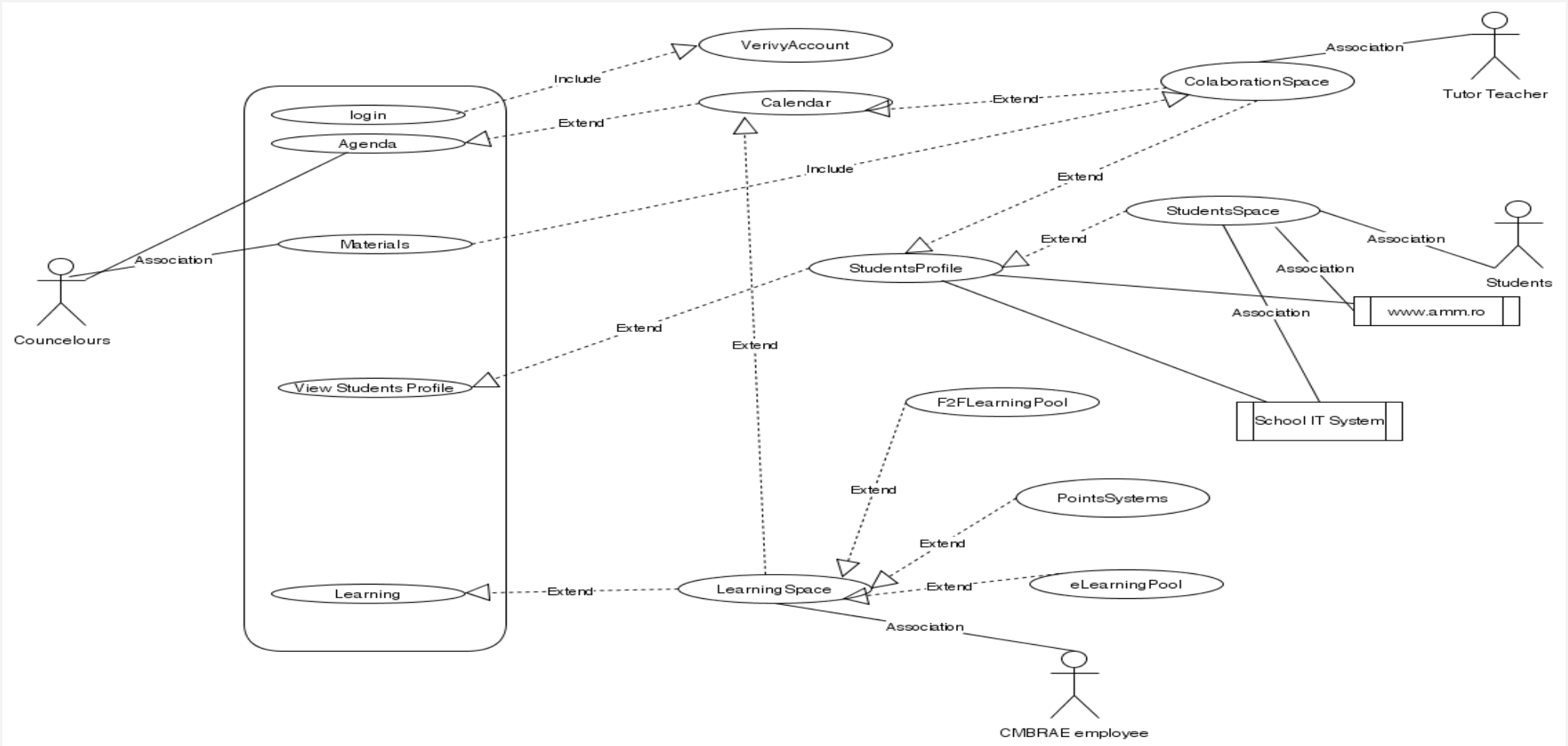
CMBRAE employee

Student's psychological test

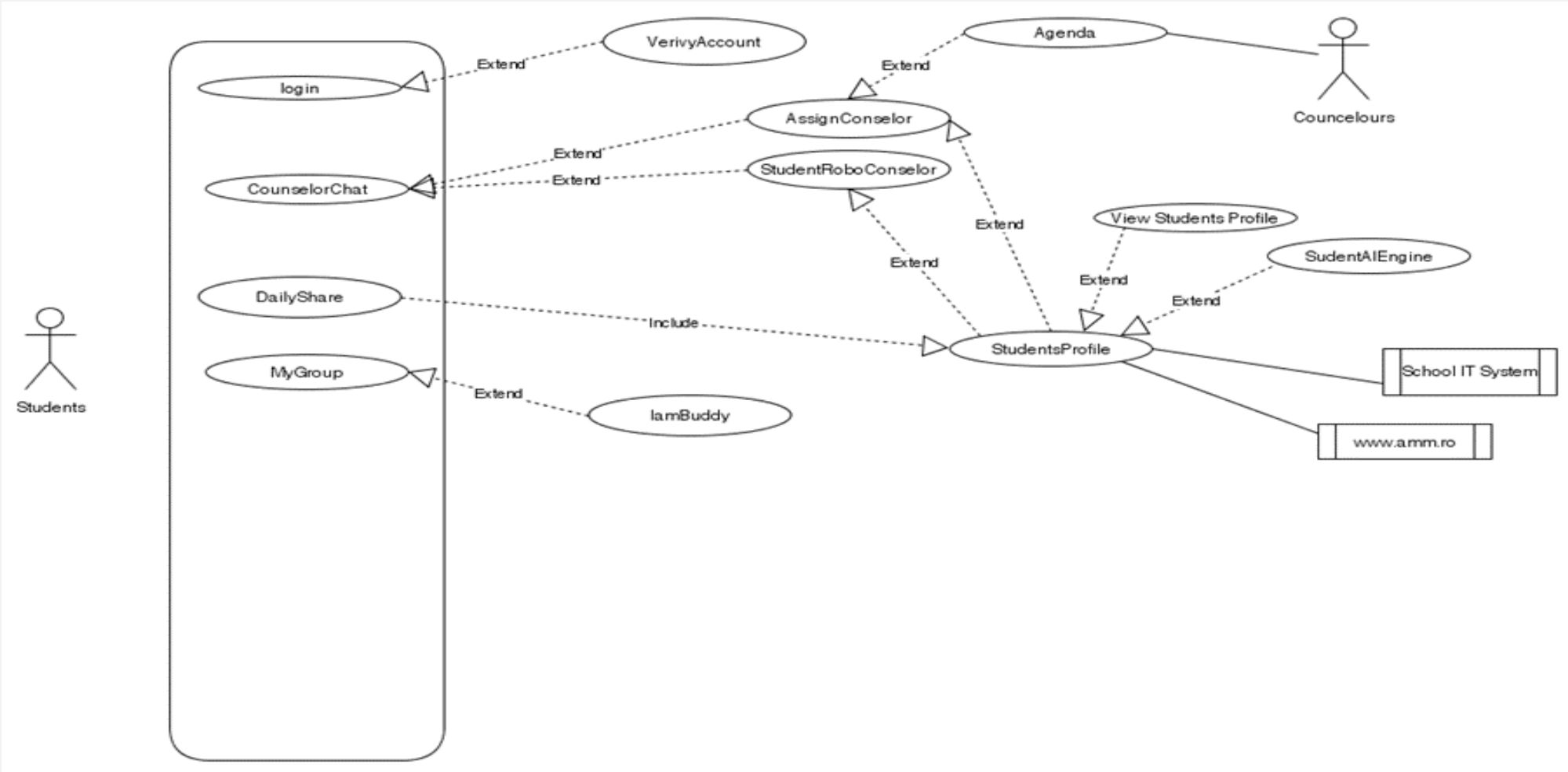
www.amn.ro

 © 2019 IBM Corporation

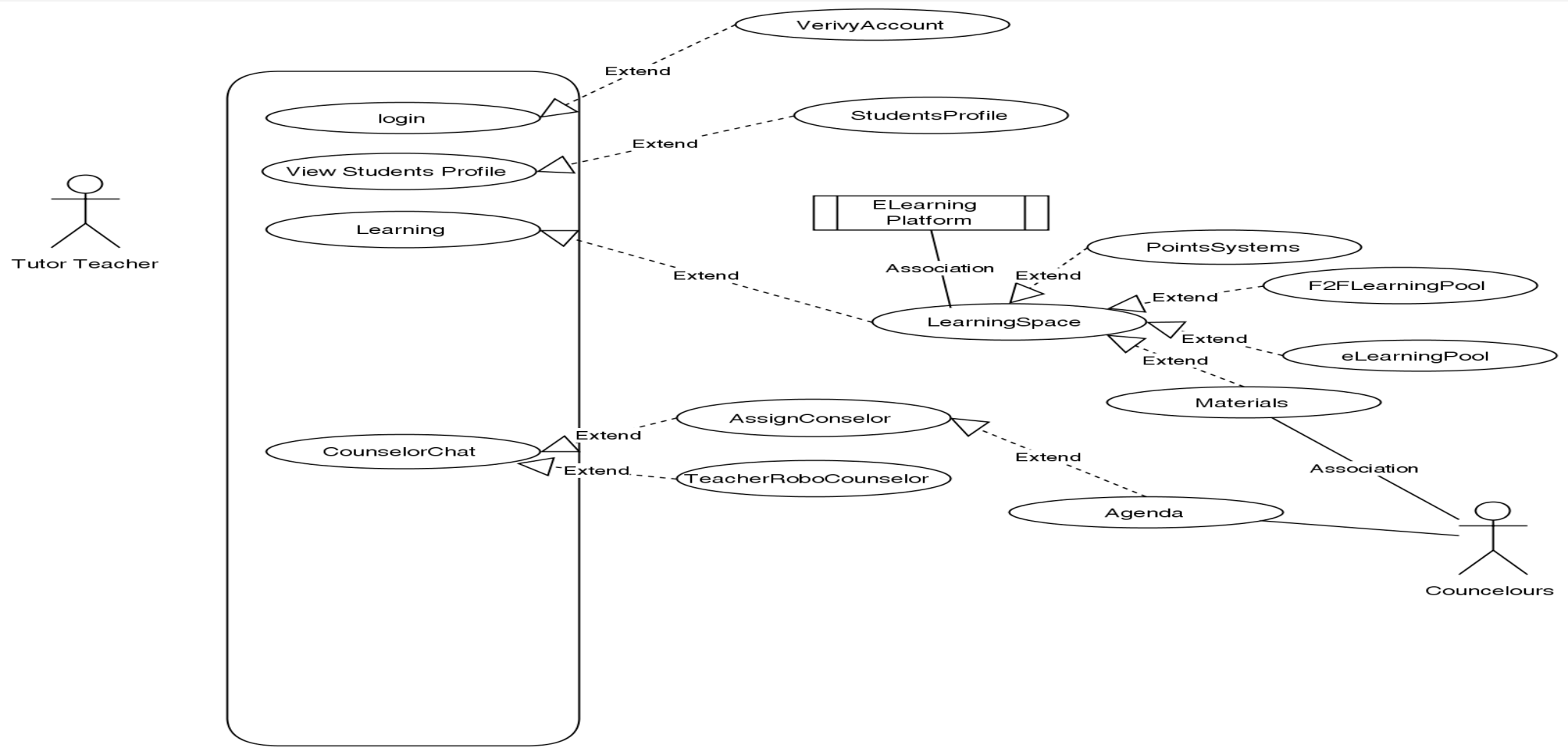
Use Case Diagram- Counselors



Use Case Diagram- Students



Use Case Diagram- Teachers



Functional and Non Functional Requirements

“Design is not just what it looks like & feels like. Design is how it works”

Steve Jobs



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Functional Requirement List

ID	Name	Description
FR001	User Identity	User Management based on JobRole and Responsibility.
FR002	Ingest Social Media Data	Insert text, images and any other unstructured data to improve straight through processing
FR003	Analytic model management	The analytics solution must offer a centralized repository for storing analytic models, so you can create, manage, validate, administer, and monitor analytic models.
FR004	Capability Infrastructure	The cloud provider should supply the tools to process data sets. These include platform tools that enable connectivity, load balancing, routing, and the like, or hardware resources such as suitable storage, compute, and networking.
FR005	Cloud Analytics for School, Student, Teacher Data	Provide a mechanism for secure connectivity of enterprise data and service endpoints to the analytics capabilities delivered by the cloud provider (if needed).
FR006	Data Quality	The analytics solution must provide capabilities for cleansing, quality checking, pre-analytic processing, and more.

Functional Requirement List

ID	Name	Description
FR007	Data Transformation	The analytics solution must be able to convert data from one format to another. The solution must also be able to correlate and match data from different sources for use by deployed analytics and other applications.
FR008	Information Management	The System must provide multiple levels of data protection, data encryption, compliance rules, processes, and audit trails to meet privacy, sovereignty, and Intellectual Property (IP) protection guidelines
FR009	Information Visualization	The analytics solution must provide interactive graphical tools to explore and view data from all parts of the analytics solution.
FR010	Support Unstructured and Structured Data Sources	The solution must support both structured and unstructured data sources.
FR011	ChatBot	The solution must be able to process intelligence chatBot based on the profile and questions are raised

Functional Requirement List

ID	Name	Description
FR012	Operations Visibility Into the Platform	The operations team requires full visibility into all platform and component errors, failures, metrics, consumption of resources, state and threshold alerting.
FR013	Alerting & Monitoring	Ability to monitor and alert the system and application availability
FR014	HelpDeskSupport	Provide Help Desk to support user inquiry as this is going to be deployed to around 500K users around Bucharest

Non-Functional Requirement List

ID	Name	Description
NFR01	Performance	Must be able to scale solutions horizontally, vertically and via sharing. Expected number of users is 250,000. Expected number of concurrent users is 2% of the total number of users
NFR02	Security and IAM	Require to integrate existing School IT system and other external System to be integrated with the system LDAP and Security Gateway to provide credential access to system
NFR03	Network and Secure Communications	The solution must follow to client's secure networking and communication standards (if any)
NFR04	Availability and Recovery	The platform must support all key business applications to provide several levels of resilience in their architecture including 7 x 24 availability and zero RPO.
NFR05	Data residency compliance is actively enforced	Part of the data governance is clearly marking data that has data residency requirements. All data movement operations will check for and enforce this compliance constraints.
NFR06	Highly Available Decision management	as part of Disaster Recovery Plan

Architectural Overview

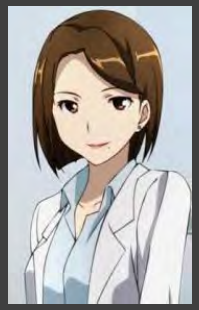
“The biggest driver of sustainable growth is the Client Experience.”

Ginni Rometty
IBM CEO



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Persona: Counselor

Overview / Description of As Is Scenario



Counselor is doing the cognitive class in one of the school. She was thinking on how she should deliver the materials, because the time is so limited due to packed schedule, she doing it as just a regular way. Finished with the session, she has to meet with one of the student. She doesn't have any information about the student. During the counseling session, she wonder on latest information is available but then she just deliver information on as per her knowledge or promise the student to come back with latest information

- Class preparation
- Counseling preparation and actions
- Self Development and Actualization. Counselors sharing session are happened in 1-2times a week, which attended by 20-30 counselors. Sharing and hearing from bigger community members is going to be more insightful



Counselor

- Deliver materials as it is. Need to cope with the latest material or direction from CMBRAE
- Student information is not available in hands, hence the counselors just use any available information available about the students. She also need to recall the latest conversation and actions from the previous counseling (if any). Some counselors might have certain information ie for student's career guidance, some might have different sources. Hence the information stated by different counselor may vary.
- Integration actions with Parent and Teacher to work on each student is rather impossible



- Slower responds to the students
- Information not that the latest nor accurate
- Might not end up as a good session result or impact to the students



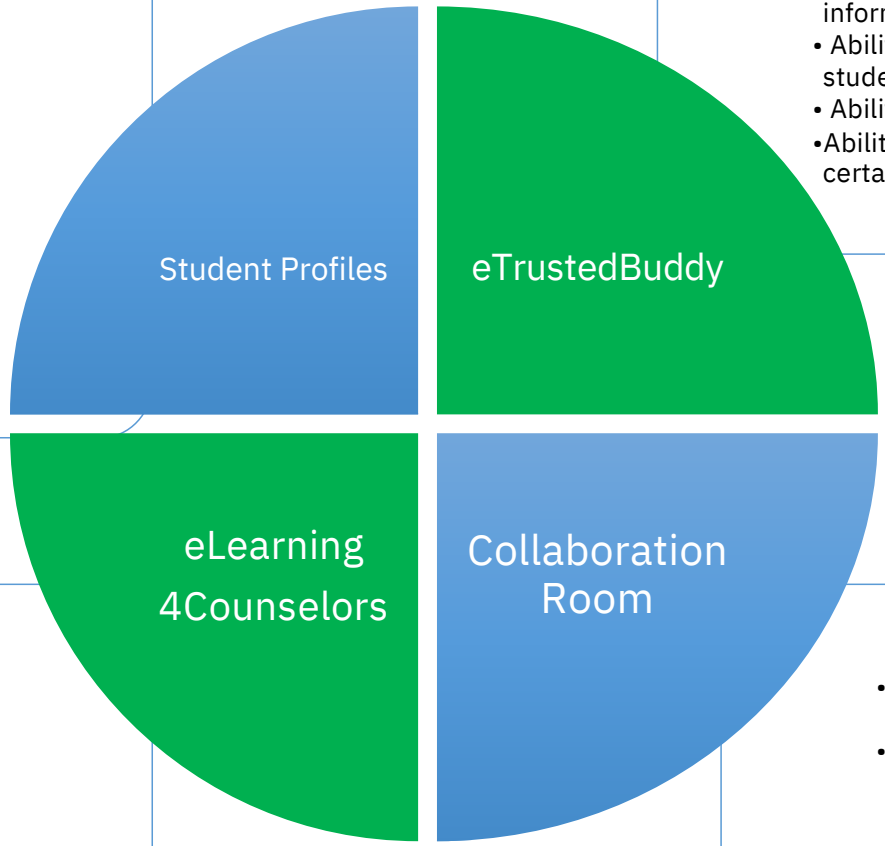
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The Needs



- Logging all the counseling activities for each students
- Provide integration with external applications/systems (ie. www.amm.ro) on the student test result as time series data for each students
- Provide integration with school application/system on the student basic information, such as student's grades, class, as time series data for each student
- make a Student social profile based on student's interaction with their social media (ie. Twitter or Blogs)
- make a students current situation based student interaction with the system about their daily lives and activities

- Ability to understand the students information
- Ability to get more insight from the current students conditions
- Ability to discuss on case are facing
- Ability to locate latest information related to certain topics



- Provide learning material related to cognitive skills teaching, coaching
- Learning Journey with point rewards (gamification)
- Promote Counselors with good learning progress for other opportunity (ie. Research Project)
- Face2Face Learning schedule

- Sharing experiences and knowledge between Teachers, Parents and Counselors
- Managed by CMBRAE to ensure the contents were submitted

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Description of To Be Scenario



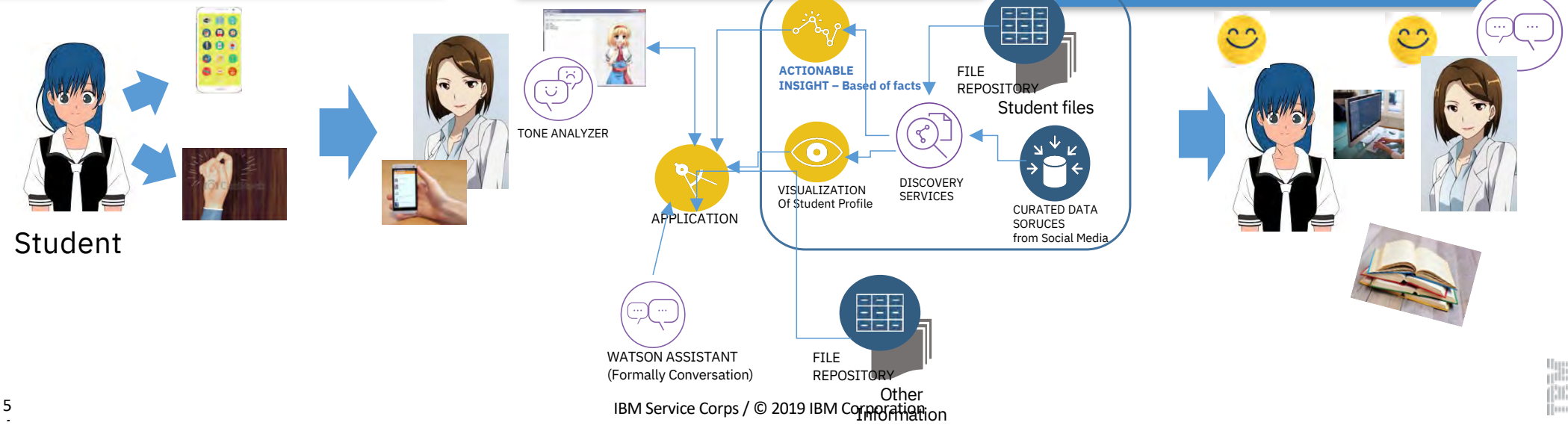
Counselor is able to see more information about students profile in summary. eTrustedBuddy will provide the information and recommendation on the possible context of the discussion together with necessary information link related to the case. For case that required special responds, eTrustedBuddy will contact available senior counselors to have discussion through chat or call. The learning build based on points system as part gamification of the learning. Special badge or certification or reward can be given to the counselors who achieve certain level. Further, it can be also integrated to other system which monitor teacher's capability set by the government.

- Students want to share problems in the area: Career discussion, Family matters, Friends issues, Bullying, etc

They just go to set calendar/agenda to counselor OR chat with the counselors OR chat with RoboCounselors OR just simply knocking the door for ad-hoc session

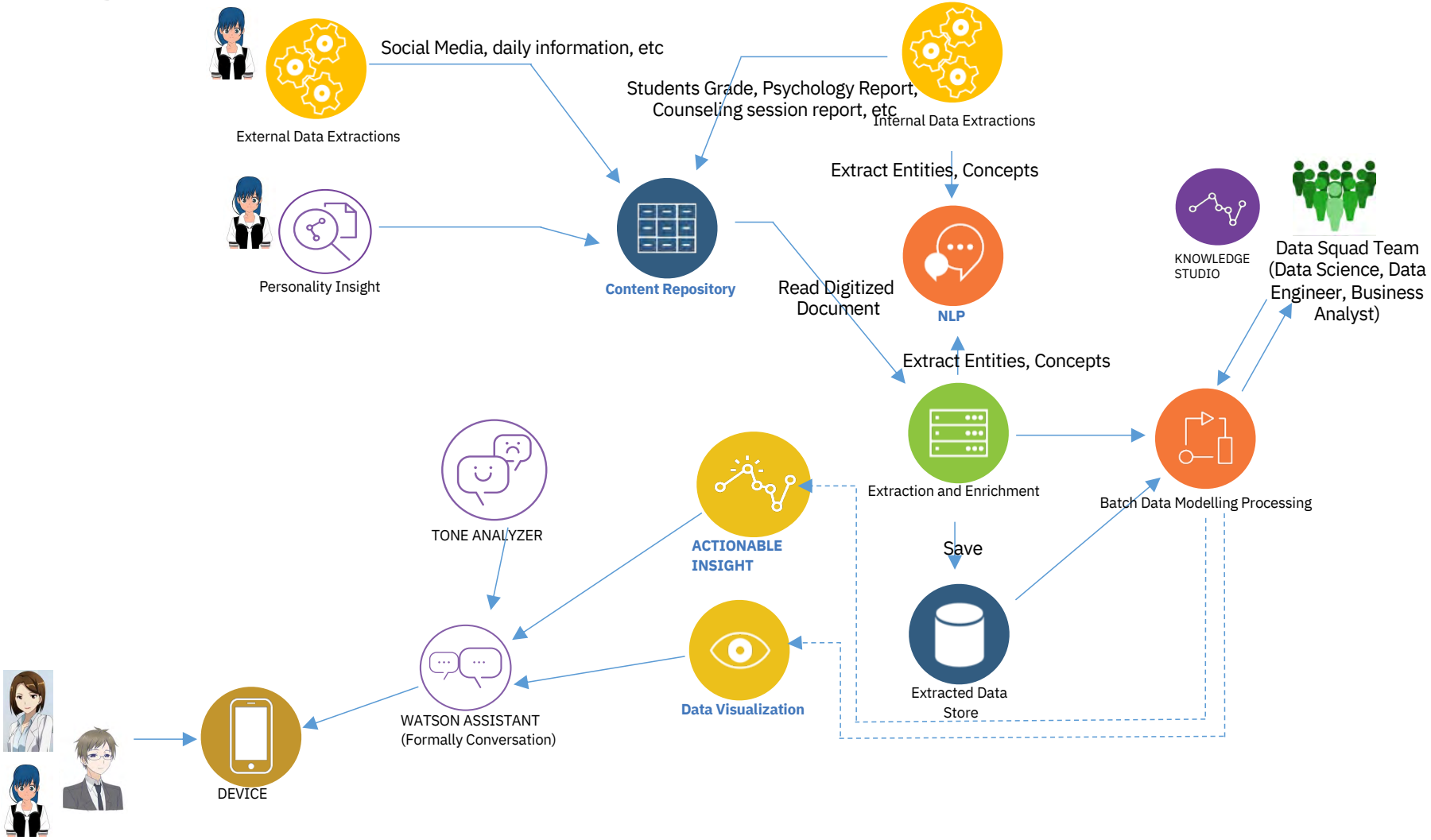
- Click on eTrustedBuddy , which connected to StudentProfile, for information needed and advise necessary actions recommended
- For ChatRoom, some basic responds, can be accommodated with Pretraining RoboChat insides eTrustedBuddy. All RoboChat's answers is personalized depending on the roles for each userID who login in

- Fruitful discussion with student. Report back the result into the system to enrich StudentProfile
- Fulfilled feeling, and sharing the experience in CollaborationRoom
- More time to do self development, reports or more students to be covered at the same time



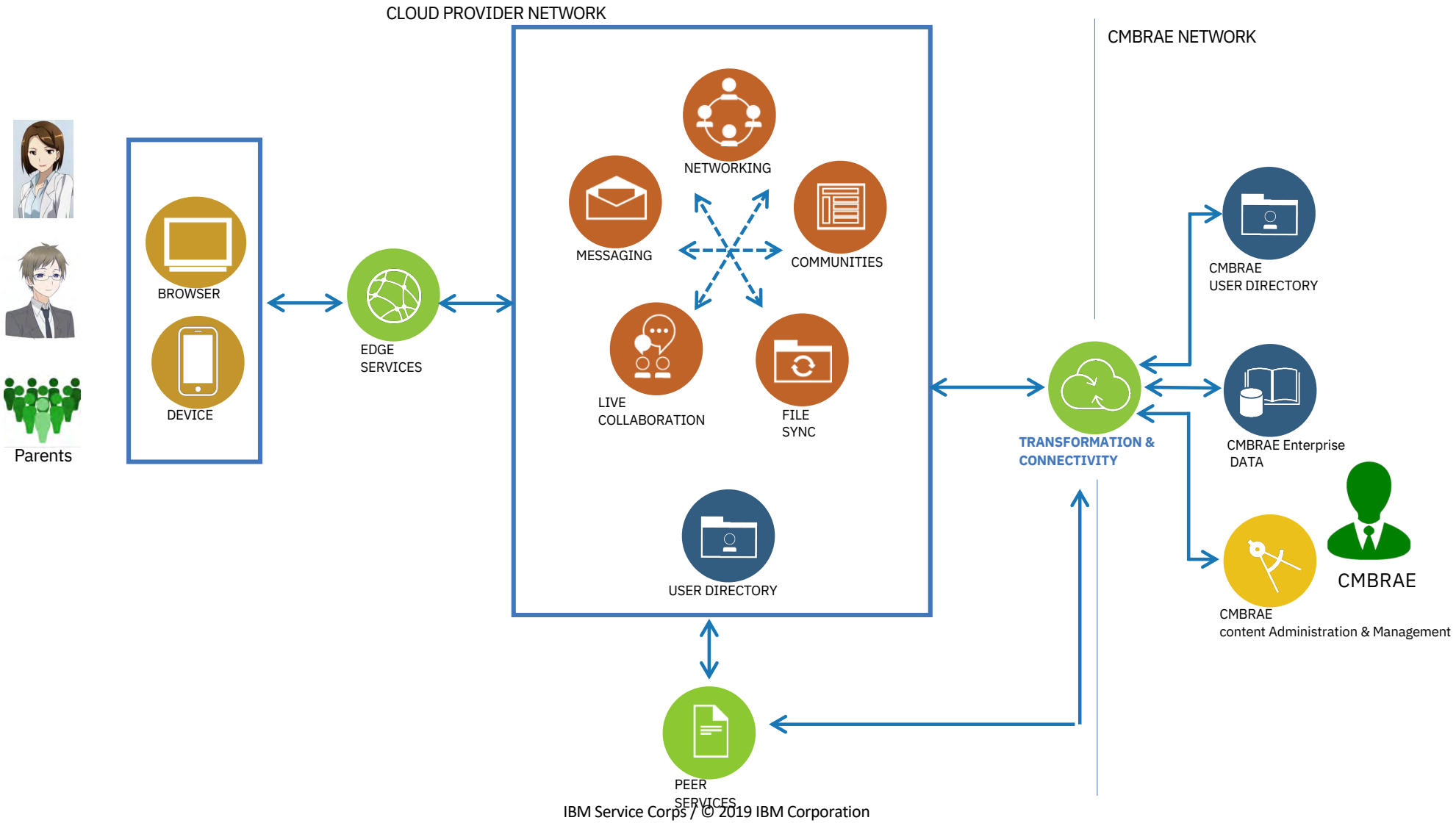
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Logical Architecture – eTrustedBuddy & StudentProfile



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Logical Architecture – Collaboration Room



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Persona: Teacher

Overview / Description of As Is Scenario



Teachers/Tutor Teachers is one of the key person that Student is looking for when they would like to discuss about their personal issues. Teacher had a challenge to responds to student inquiries as they don't have the skills to responds on the possible case arise.

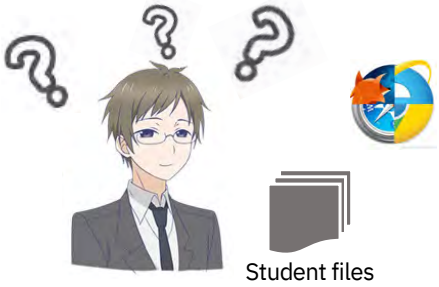
- Students sharing problems in the area
  - Career discussion
  - Family matters
  - Friends issues
  - Bullying, etc

- Look at necessary information available in hands
- Call counselors for further advise, as less skill capability
- Direct to relevance counselors to work on the case
- Searching for student's information available on the school system (if any)

- Slower responds to the students
- Might not end up as a good session result or impact to the students



Student



Student files



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The Needs



- Crowd sourcing material sharing
- Examples of Cognitive sharing session with simulation or games
- Enrich with 'likes', to help promote teacher who has good material products
- Managed by CMBRAE to ensure the contents were submitted

TeachingWithFun

eTrustedBuddy

- Ability to discuss on case are facing

eLearning 4Teachers

- Provide learning material related to cognitive skills teaching, coaching
- Learning Journey with point rewards (gamification)
- Promote teacher with good learning progress for other opportunity

Collaboration Room

- Sharing experiences and knowledge between Teachers, Parents and Counselors
- Managed by CMBRAE to ensure the contents were submitted

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Description of To Be Scenario



Teachers/Tutor Teachers is able to see more information about students profile in summary. eTrustedBuddy will provide the information and recommendation on the possible context of the discussion together with necessary training link related to the case. For case that required special responds, eTrustedBuddy will contact available counselors to have discussion through chat or call. The learning build based on points system as part gamification of the learning. Special badge or certification or reward can be given to the teachers who achieve certain level. Further, it can be also integrated to other system which monitor teacher's capability set by the government.

- Students want to share problems in the area: Career discussion, Family matters, Friends issues, Bullying, etc

They just go to set calendar/agenda to teacher or counselors OR chat with the teacher OR just simply knocking the door for ad-hoc session

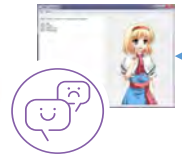
- Click on eTrustedBuddy , which connected to StudentProfile, for information needed and advise necessary actions recommended
- As the teacher allocate the time to learn on cognitive development, counseling tips&tricks, and other face2face workshops, he is confident to meet with the student and discuss about the issue

- Fruitful discussion with student. Report back the result into the system to enrich student's profile
- Fulfilled feeling, and sharing the experience in CollaborationRoom

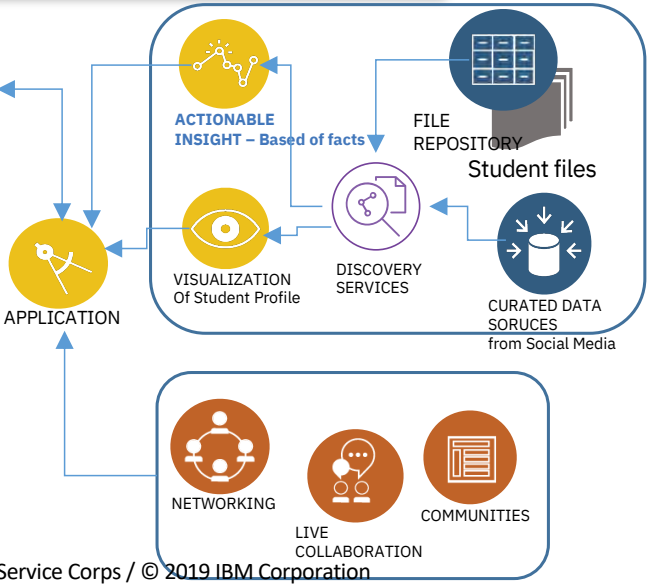


Student





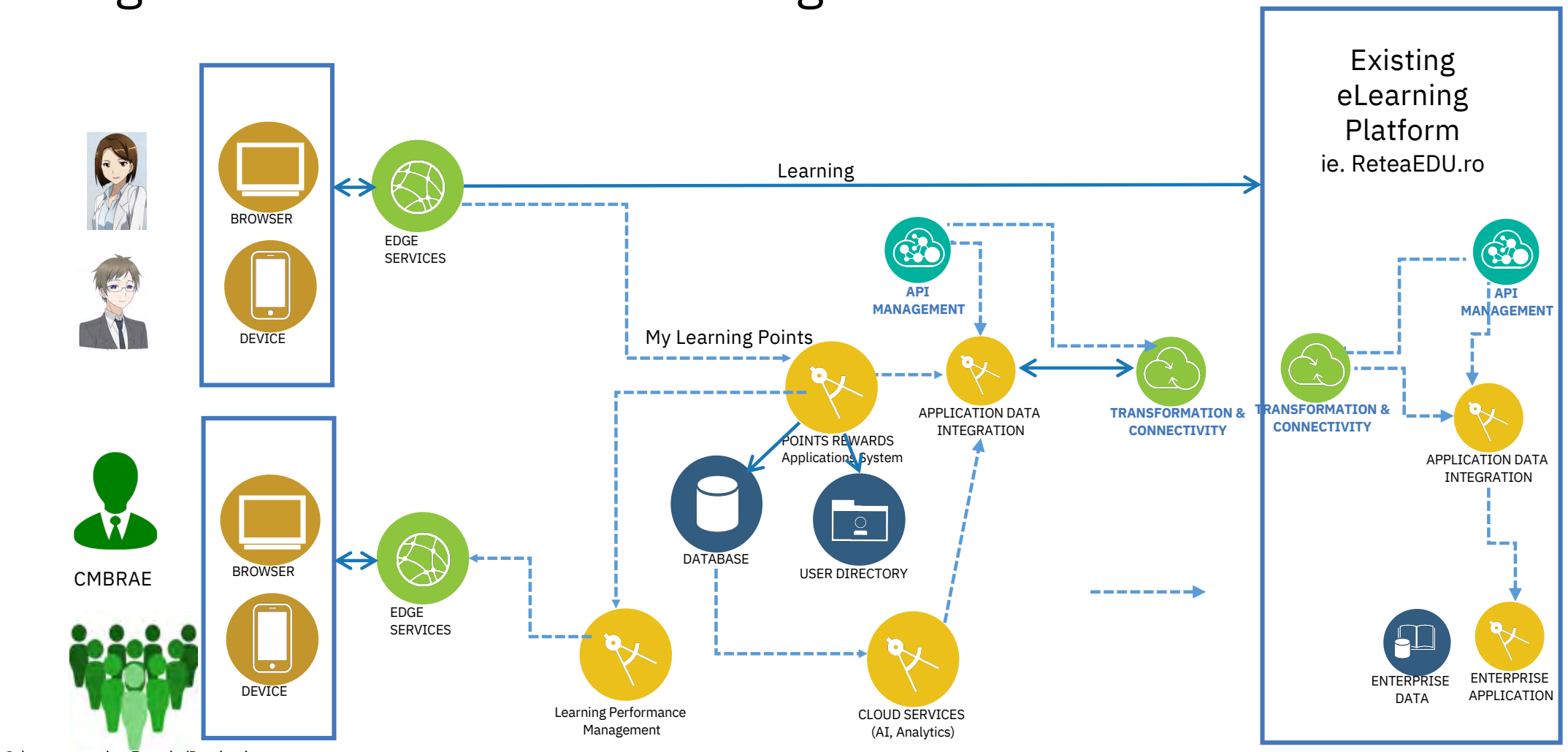
TONE ANALYZER





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Logical Architecture – eLearning



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Persona: Students

Overview / Description of As Is Scenario



Student as a young person is on her journey to develop herself to become a adult and mature person. In her learning journey, she is need someone to teach, advise and coach her. In the current moment, she have is only her friends which also in the same age where might be don't have enough experience and knowledge to teach and advise. Parents, Teachers and Counselors should take the important role to participate into the process. Very unfortunate, she might not as luck as the other friend, which she didn't know who is her counselor, she also not comfortable to speak with the teacher and the parent also quite occupied with their own works. She would like to have someone that they can talk with about their issues in her most comfort way

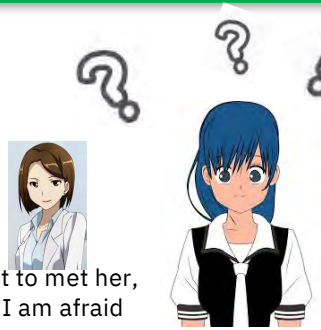
- Students wants to share problems and discuss on one of the following subject:
  - Career discussion
  - Family matters
  - Friends issues
  - Bullying, etc

- Look at necessary information available in hands by searching on the internet
- Call or chat with closed friends to share the feeling
- She know that she can talk to counselor, the counselor looks friendly and helpful. She is thinking to talk with counselors but the bad perception (from friends and parents) is haunted her, then she decided to keep it by herself

- Feel frustrated, and
- Hoping someone or somebody can help her whenever and whenever she wanted to
- Hoping for place that she can look for to get relevance information related to her issues/topics easier



Student



I want to met her, but I am afraid



My grades



Browsing information



My dreams

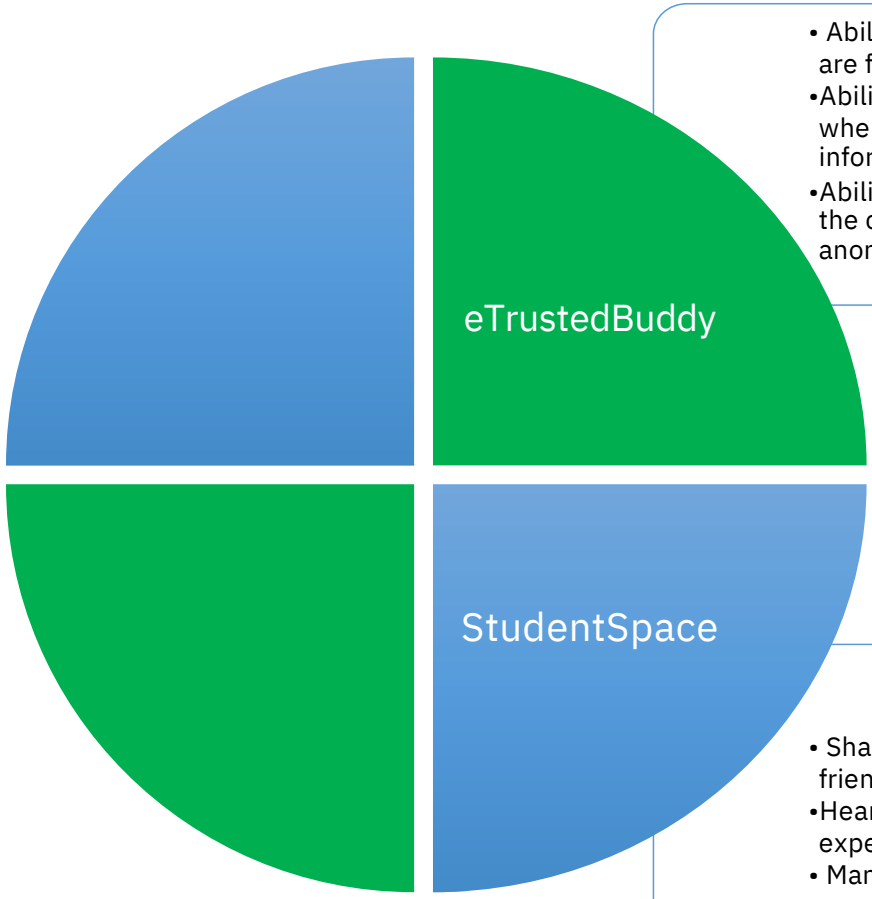




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The Needs



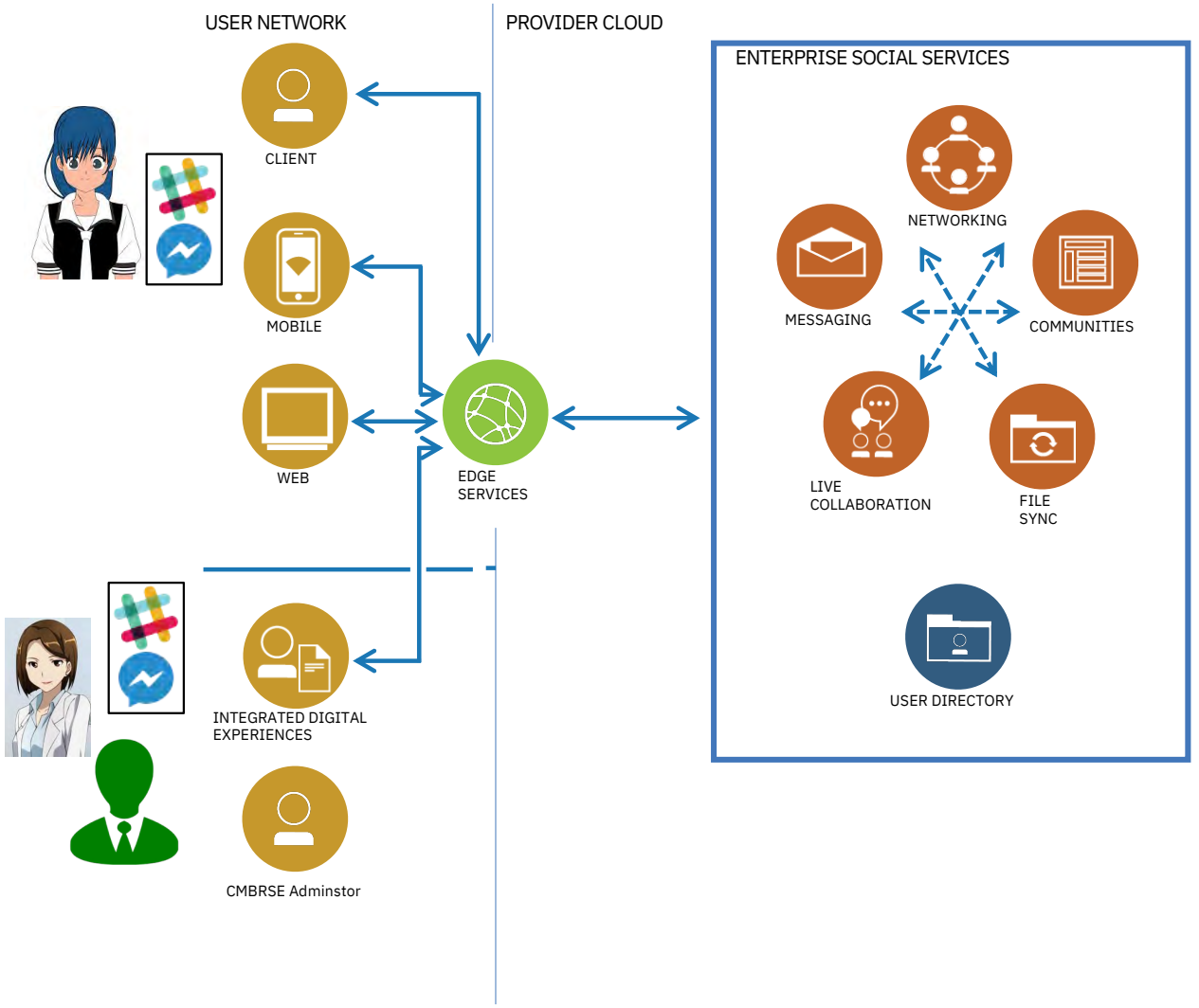


- Ability to discuss on case are facing
- Ability to help point out where I can get the information
- Ability to have a call with the counselors anonymously

- Sharing experiences with friends and buddy
- Hears from others experiences
- Managed by CMBRAE to ensure the contents were submitted

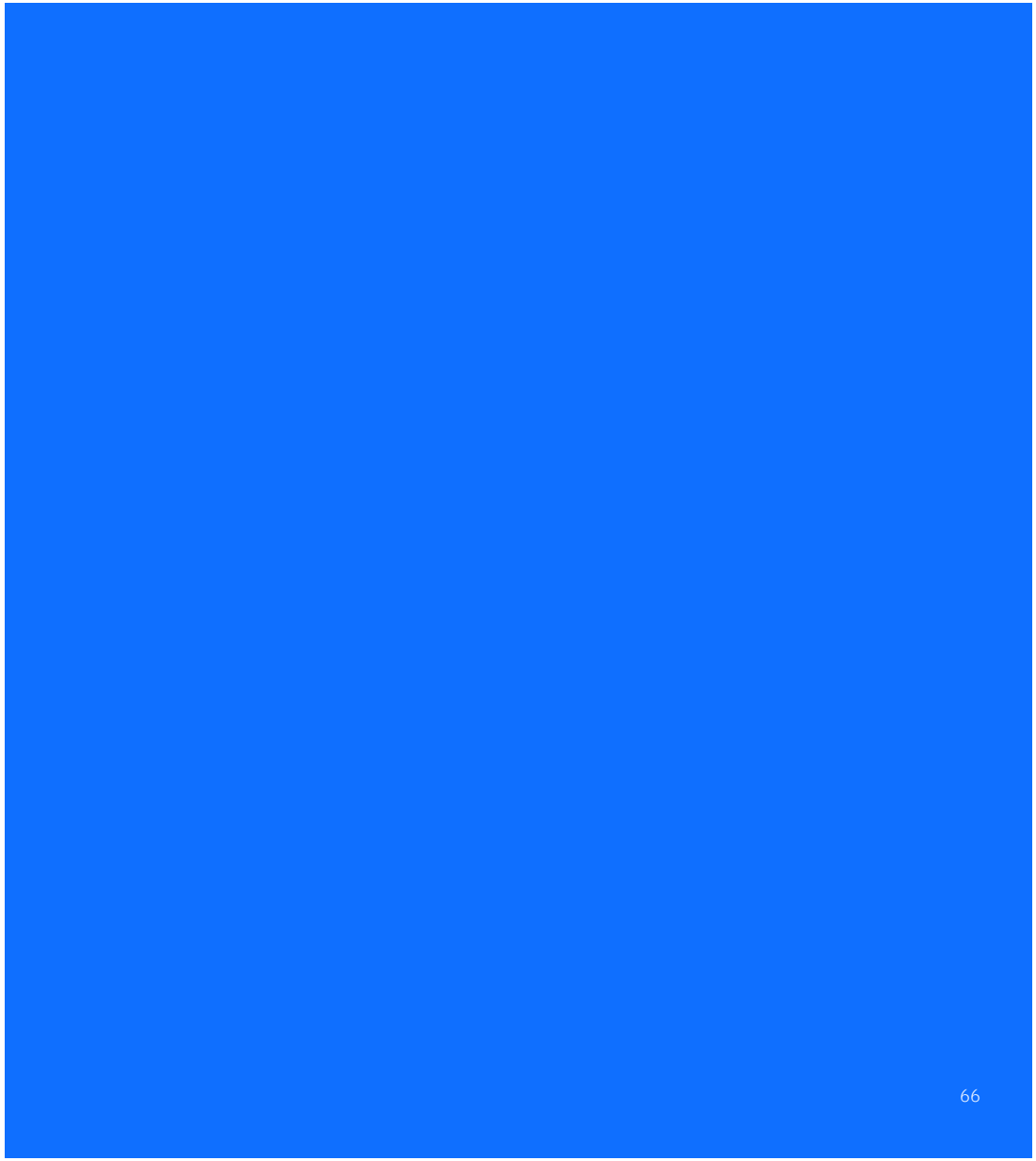
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Logical Architecture – StudentSpace



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Questions





Appendix I: Revised and approved Statement of Work

IBM Corporate Service Corps

SCOPE OF WORK JAMS – Bucharest | October, 2019

Scope of Work
[Bucharest Center for Educational Resources and Assistance]

Program Information

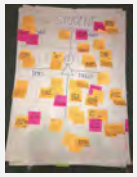
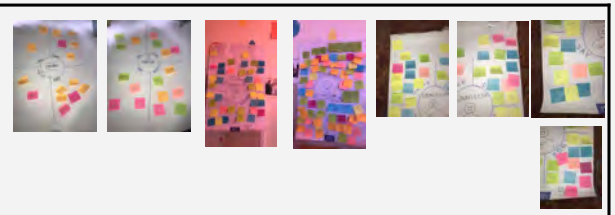
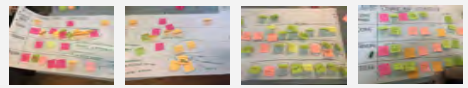
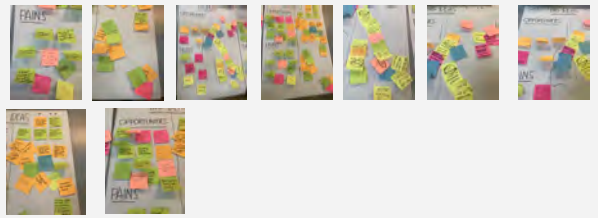
Program Name	Country & Team ID #	Assigned Consultants
IBM Corporate Service Corps	Romania 8	• [Ari Pratiwi (IBM Indonesia)] • [Marinelle Briones (IBM Filipine)] • [Jennifer Gonzalez (IBM US)] • [Seiya Katoh (IBM Japan)]
Program Manager	**Project Start Date**	
	11 October	
Category/Type	**Project End Date**	
Strategy or Roadmap Methodological approach of education/career module	8 November	
IBM Strategic Focus		
Social		

Appendix II: Three Design Thinking Workshop to create personas (Mural Output)

	Students	Teachers	Counselors
			
Empathy Map	https://ibm.ent.box.com/file/552263949638	https://ibm.ent.box.com/file/552277405264	https://ibm.ent.box.com/file/552272663524
As-Is Scenario	https://ibm.ent.box.com/file/552263947238	https://ibm.ent.box.com/file/552277406464	https://ibm.ent.box.com/file/552272664724
Big Ideas	https://ibm.ent.box.com/file/552263948438	https://ibm.ent.box.com/file/552277404064	https://ibm.ent.box.com/file/552272662324

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Appendix II: Three Design Thinking Workshop to create personas (Picture)

	Students	Teachers	Counselors
Empathy Map			
As-Is Scenario			
Big Ideas			

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Appendix III: High Level Roadmap to Digital Transformation

Training and Enablement Framework	https://ibm.ent.box.com/file/552304801978
Mock-ups of how this is applied	https://ibm.ent.box.com/file/552316780141
Functional and Non-Functional Requirements	https://ibm.ent.box.com/file/552306073385
Architectural Diagram	https://ibm.ent.box.com/file/552306073385

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Appendix III: Suggested Training Framework for Teachers and Counselors

Area of Impact	Suggested Training Programs	Target Audience	Purpose/Objective	Frequency
Professional development	Individual and collaborative research training program; Informal dialogue to improve teaching	Counselors Teachers	Training for developing the necessary knowledge-base and skills teachers require to carry out their role effectively. This does not only involve learning new theoretical teaching ideas and suggestions, but also trying them out and learning how to make them more effective within their teaching contexts.	2-3 times a year
	Professional development network training programs		- Training to improve personal strengths and characteristics that aid teachers define and make sense of their teaching practice and of themselves as individuals. - This is through developing the necessary life skills that can help them grow in and outside their profession.	2-3 times a year
	Teaching and Counseling for Children with Special Needs		Gives the teachers and counselors the special skills to guide and support the children with special needs	3-4 times a year

Appendix III: Suggested Training Framework for Teachers and Counselors

Area of Impact	Suggested Training Programs	Target Audience	Purpose/Objective	Frequency
Career Management Skills Training	Career Development and Postsecondary Readiness	Counselors	- Have meaningful college and career conversations with students at all grade levels - Describe the school counselor's role in career development - Articulate the connection between school and the world of work to students - Identify ways to help students transition from school to postsecondary education and/or the world of work - Brainstorm ways to collaborate with administrators, teachers, staff and decision makers to create a postsecondary-readiness culture - Advise students on multiple postsecondary pathways, including college, career-specific credentials and certifications, apprenticeships, military, service-year programs and full-time employment with a family-supporting wage - Identify gaps in college and career access and the use of such data to address both intentional and unintentional biases related to college and career counseling	1x a year
	Enhancing Competencies for Practitioners in Career Guidance		- The participants will gain insights into the theoretical as well as practical aspects of Career Guidance in Europe. - They also will get acquainted with the different concepts and methods of federal career guidance and career placement (in terms of specific target groups).	2-3x a year
	Guidance and Counseling in relation to to revised competencies framework		Participants of the Academia will experiment into a visible, relevant and positive learning environment how guidance and counselling competences are developed in schools through a rethinking or reconfiguration of theories, strategies, methods/techniques and attitudes for a well- being of students in their school and life challenges being into continuous and dynamic change	2-3x a year

Appendix III: Suggested Training Framework for Teachers and Counselors

Area of Impact	Suggested Training Programs	Target Audience	Purpose/Objective	Frequency
Basic Counseling for Teachers	Cognitive-Behavioral Management	Teachers	- Cognitive strategies are designed to improve executive functions, metacognition, and organizational skills through teaching students to examine how they attempt and complete a task - Cognitive education involves students learning about how they think and provides the students with opportunities to reflect and explore	2-3 times a year
	Conflict Resolution		- The facilitator first looks at understanding the students and what triggers their thoughts, then identifies their response to those thoughts, and will then guide the students through an exploration of alternative thoughts and reactions	2-3 times a year
	Positive Reinforcement Training		- It uses mediation techniques that reinforces positive behavioral support by first understanding what the problem is, why it is occurring, and how to prevent it. - It then aims to prevent the reoccurrence by providing specific guidelines and routines, along with modifying the physical environment if needed	2-3 times a year
	Second Step Training		Training involves social skills curriculum, and another teacher used social skills activities as “modeling, role playing, direct instruction, reflection, reading social stories, and environmental structure for problem solving	2-3 times a year
	Active Listening Techniques		Uses strategies and nonjudgmental responses in order to be fully receptive to the students and situations. It is also recommended that any type of program be taught systematically, over an extended period of time, and combined with academics	2-3 times a year

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Appendix III: Suggested Training Framework for Teachers and Counselors

Area of Impact	Suggested Training Programs	Target Audience	Purpose/Objective	Frequency
Digital Training for Teachers	Leadership in Digital Learning	Counselors Teachers	- Teachers will demonstrate leadership in accelerating their integration in digital teaching and learning pedagogies - Engage in virtual and face-to-face learning communities to expand mastery of technological applications for professional growth and student learning - Engage in peer collaborative problem solving through continuous planning, designing, testing, evaluation, and recalibration of teaching methods using appropriate digital technology.	3-4 times a year
	Digital Citizenship Training		- Teachers will model and teach digital citizenship by the ethical, respectful, and safe use of digital tools and resources that support the creation of a positive digital school culture - Engage in responsible and professional digital social interaction - Ensure full, equitable access and participation of all learners through high-quality technology tools and resources - Demonstrate global awareness through engaging with other cultures via advanced communication and collaboration tools.	3-4 times a year

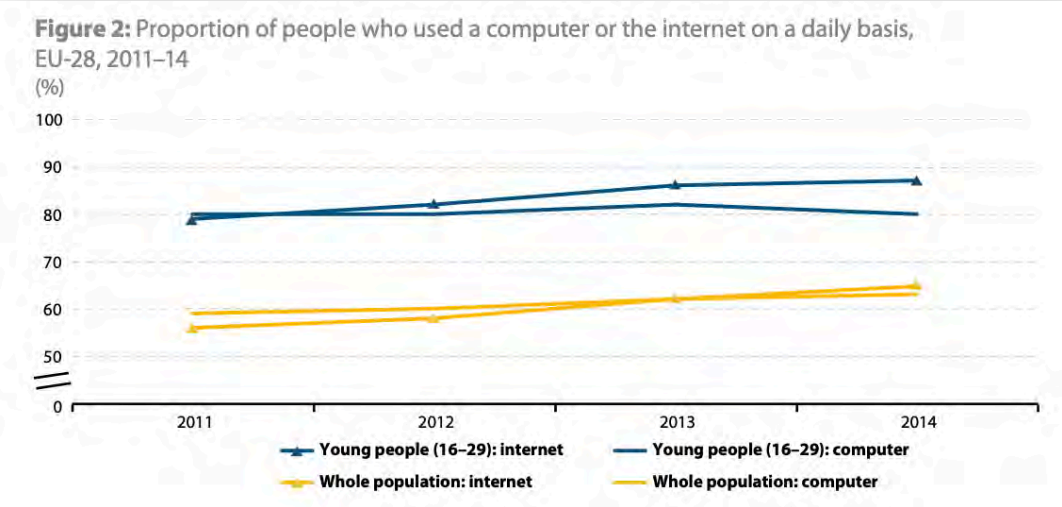
Appendix III: Suggested Training Framework for Teachers and Counselors

Area of Impact	Suggested Training Programs	Target Audience	Purpose/Objective	Frequency
Digital Training for Teachers	Digitial Content and Instruction	Counselors Teachers	- Teachers will know and use appropriate digital tools and resources for instruction. - Design technology-enriched learning experiences that encourage all students to pursue their individual interests, preferences, and differences. - Immerse students in exploring relevant issues and analyze authentic problems through digital tools and resources. - Evaluate and appropriately modify the form and function of the physical learning environment to create a conducive digital learning environment.	1-2 times a year
	Data and Assessment Training		- Teachers will use technology to make data more accessible, adjust instruction to better meet the needs of a diverse learner population, and reflect upon their practice through the consistent, effective use of assessment - Utilize technology and digital tools to synthesize and apply qualitative and quantitative data to: (1) Create individual learner profiles of strengths, weaknesses, interests, skills, gaps, preferences (2) Inform, personalize, and calibrate learning experiences (3) Identify specific plans of action related to weakness, gaps, and needed skills as identified in the learner profile (4) Reflect and improve upon instructional practice	3-4 times a year

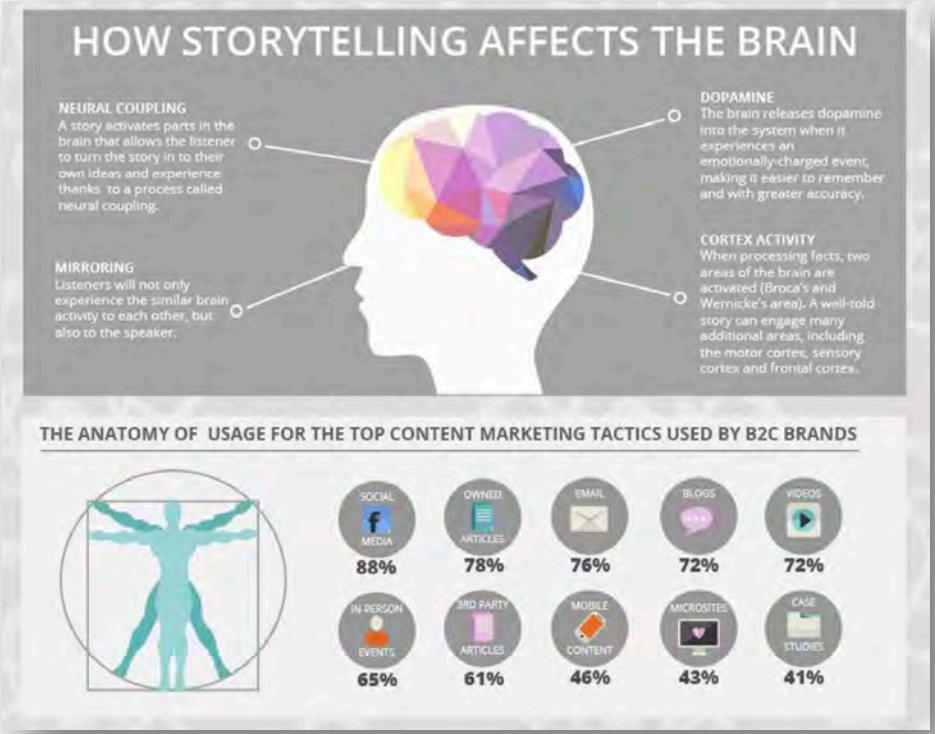
Back-up Slides

Mobile Facts & Figures

- The household internet usage friends as well as daily consumption has been an upward trend

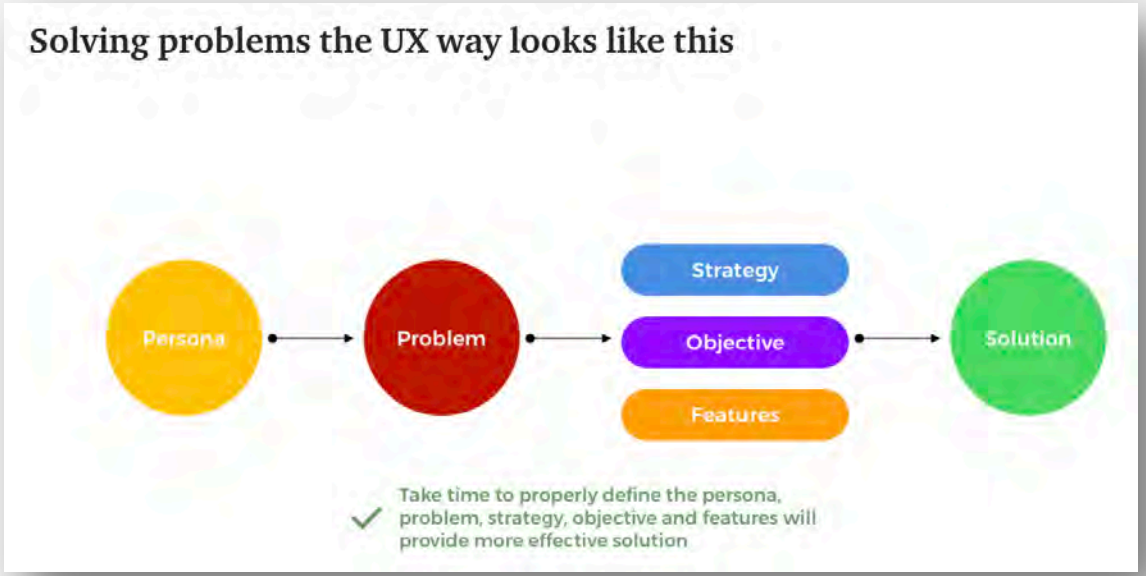


- Importance of storytelling as an improved method to consume content



User Experience Through Design

Taking concepts from the IBM Design Thinking framework, it's imperative that the team understands the meaning of digital UX (user experience) and UI (user interface) design.



Guidelines

- **Always concentrate on the user** – know your audience (needs and expectations)
- **Simple design aided with graphics** – focus more on the content vs. the visual aspects to get your message across
- **Use of bright colors** – consider the psychology of color in relation to a child
- **Stay on tech trend** – keep researching on latest app design trends

Legal Requirements & Considerations

- **Parental consent / access** – properly protect a child's personal information by attaining parental content which requires clearly describing the parental rights, providing direct notice to parents and obtain verifiable parental consent, providing parental access, and giving parents the opportunity to withdraw consent
- **GDPR compliance** – regulation that requires business to protect the personal data and privacy of EU citizens for transactions

"Under EU GDPR regulations, consent is one of the Lawful Reasons for processing the data of children. If using this basis for processing the data of children under 13, you must get verifiable consent from a parent or guardian unless the service you offer is a preventative or counseling service"

- **User-generated content** – take additional precautions, such as a reporting system
- **Privacy**

"If you target children over the age of 13, you must write clear and age-appropriate privacy notices for them so that they understand what they're consenting to."

