

CS691
July 2024



Math APP

Your Personal Math Assistant

Agenda

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Our Team



Olivia Arroyo

Product Owner/
Developer



Xiaofeng Leng

Developer



Amélie Obas

Scrum Master

Improvements

- Targeted Group Feedback for Retrospective
- Overlayed Metrics
- MVP Completion
- Application Home Page
- Application Dashboard
- Application Student Progress Page

Problem Statement



Currently there are apps available that allow students to scan their Math homework problems and instantly receive answers to those exams. However, providing a student with an answer on a homework problem does not help the student learn how to solve that problem and can lead to a learned helplessness.

These applications are frowned upon in the educational setting because they don't provide students with the tools they need to learn- no one learns from receiving the answer and not working through the problem.

Students often hide that they are using these apps since they don't want to admit that they are struggling and using them could also be considered cheating. If these applications were modified, they could provide students with a richer learning experience and be a tool to push students through the productive struggle.

Project Description

- A web app that helps students tackle math problems effectively and offers educators insights into student growth and struggles.
- Identifies math problem topics through real-time text classification and provides step-by-step instructions, model problems, and interactive tutorials.
- Caters to students needing resources relevant to their current learning and educators aiming to gauge student understanding and mastery of the material.
- Utilizes advanced image recognition to offer instant, detailed assistance, making math learning more accessible and less frustrating.
- Supports teachers and tutors with responsive pedagogical tool to better assist students and their homework needs.



Educators Assembled Team Agreement

The Team Agreement document for the Educators Assembled is a cornerstone for our collaboration and success on the CS691 Capstone Project. This document outlines our shared values, communication and meeting norms, and mutual commitments to ensure a productive and respectful working environment and experience. By clearly defining our expectations and responsibilities, we aim to build trust and ensure smooth project execution. Together, we commit to upholding these principles, supporting each other and striving for excellence in completing our Capstone Project.

Terms of Agreement

Team Values

- **Respect:** We will treat each other with respect and value diverse opinions and ideas.
- **Communication:** We will maintain open, honest, and timely communication.
- **Commitment:** We are dedicated to the success of the project and will fulfill our responsibilities.
- **Collaboration:** We will work together effectively, supporting and helping each other as needed.

Communication and Meetings

- The team will have clear communication throughout the project's completion. The team will have recurring weekly meetings via Zoom every Monday at 7pm. The team will have status updates on Wednesdays and Saturdays via Discord. Any other communication throughout the week will take place through the Discord messaging group.
- A shared Google Drive folder will contain all of the Capstone Project's files. Each member will be a shared collaborator on the folder and will have access to view and edit each resource.
- Team members are expected to respond to messages within 24-48 hours during weekdays.

Deliverables

- **Work Division:** The entire project will be divided into equal parts and the responsibilities of the project will be distributed amongst all team members. As a group, we will

Team Agreement

determine how the project tasks are divided based on each member's skill expertise. As a team we will decide the benchmark dates that each task is to be completed by.

- **Accountability:** Each team member is accountable for their assigned tasks and will regularly update the team on progress during the biweekly status updates on Wednesdays and Saturdays.

Mutual Commitments

- **Punctuality:** We commit to being on time for meetings and deadlines.
- **Preparation:** We commit to being prepared for all meetings and be an active participant.
- **Support:** We commit to supporting each other's work and helping each other out when needed.
- **Respect:** We commit to respecting each other's ideas, time and contributions.

Team Member	Email
Olivia Arroyo	oa92316n@pace.edu
Xiaofeng Leng	xl98363p@pace.edu
Amélie Obas	ao89721@pace.edu

User Persona: Student



Joseph is an 11th grade high school student in New York City. He often stays after school to get help from his teachers, but he needs more support at home when he's working on Math homework on his own.

Background

Age: 16
Gender: Male
Education: High School junior
Location: New York City

Goals

- Improve Math grades to qualify for AP classes
- Prepare for the SAT's and Regents Exams
- Gain a deeper understanding of math concepts to be college ready

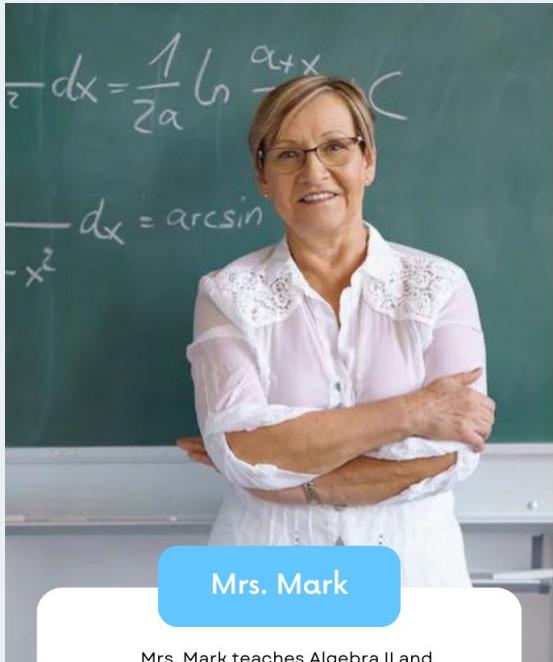
Motivations

- Aspires to get into a top tier college
- Enjoys interactive and gamified learning experiences
- Prefers quick, on-the-go learning tools accessible from his smartphone

Pain Points

- Struggles with Advanced Algebra and Calculus concepts
- Finds it difficult to keep track of different study resources
- Needs personalized guidance to understand complex problems, especially when studying at home

User Persona: Teacher



Mrs. Mark

Mrs. Mark teaches Algebra II and Precalculus. She has been teaching for over 20 years. She is trying to find new ways to utilize technology to support students when learning at home.

Background

Age: 50
Gender: Female
Occupation: High School Algebra II and Precalculus teacher
Location: New York City

Goals

- Enhance student engagement and performance in math
- Improve final grades and regents scores
- Provide resources and methods for students to practice and study independently

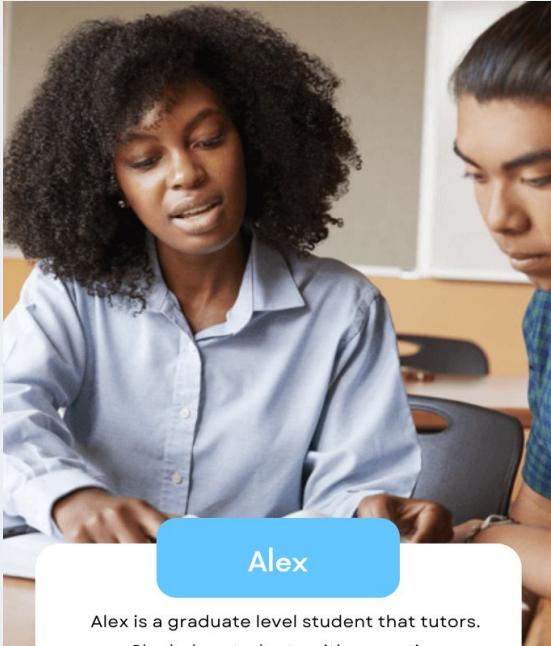
Motivations

- Committed to helping students succeed and develop a passion for math
- Values tools that provide comprehensive teaching resources and assessments
- Strives to incorporate more technology in the classroom to enhance learning

Pain Points

- Needs resources that cater to diverse student learning styles and levels
- Requires tools to monitor student progress and identify areas of improvement
- Finds it challenging to keep up with new educational technologies

User Persona: Tutor



Alex

Alex is a graduate level student that tutors. She helps students with executive functioning challenges and content coursework. She needs a way to keep track of her students' progress so she can provide them with additional tools to learn and be successful.

Background

Age: 22
Gender: Female
Occupation: Graduate student and tutor
Location: New York City

Goals

- Enhance the effectiveness of tutoring sessions
- Provide personalized supports to students
- Monitor students progress
- Help the student communicate with their teacher and advocate for themselves

Motivations

- Passionate about helping students overcome their math challenges and gain confidence
- Values tools that help students understand the underlying concepts without just giving them answers

Pain Points

- Needs to quickly diagnose student difficulties and provide tailored explanations
- Requires diverse resources to address different student learning styles
- Faces challenges in tracking student progress outside of tutoring sessions

Minimal Viable Product

- **Problem Input:** Implement an input system for users to write their math problems directly into the app.
- **User Interaction:** The teacher can reply to or comment on the questions posed by the student.
- **User Interface:** Design a simple and intuitive user interface to facilitate easy navigation and interaction with the app.
- **Testing and Debugging:** Conduct thorough testing and debugging to ensure the functionality and reliability of the app on different Android devices.

Languages & Tools



Java



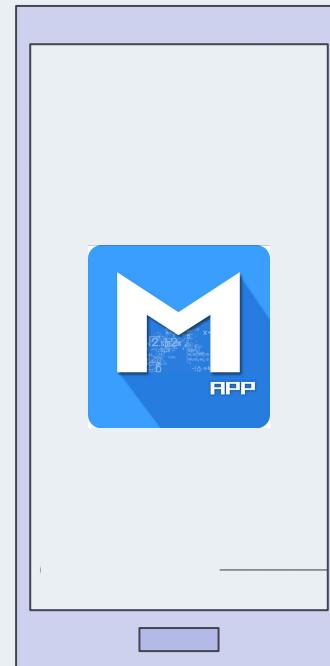
Python



Android
Jetpack



Tensorflow
Lite



Figma

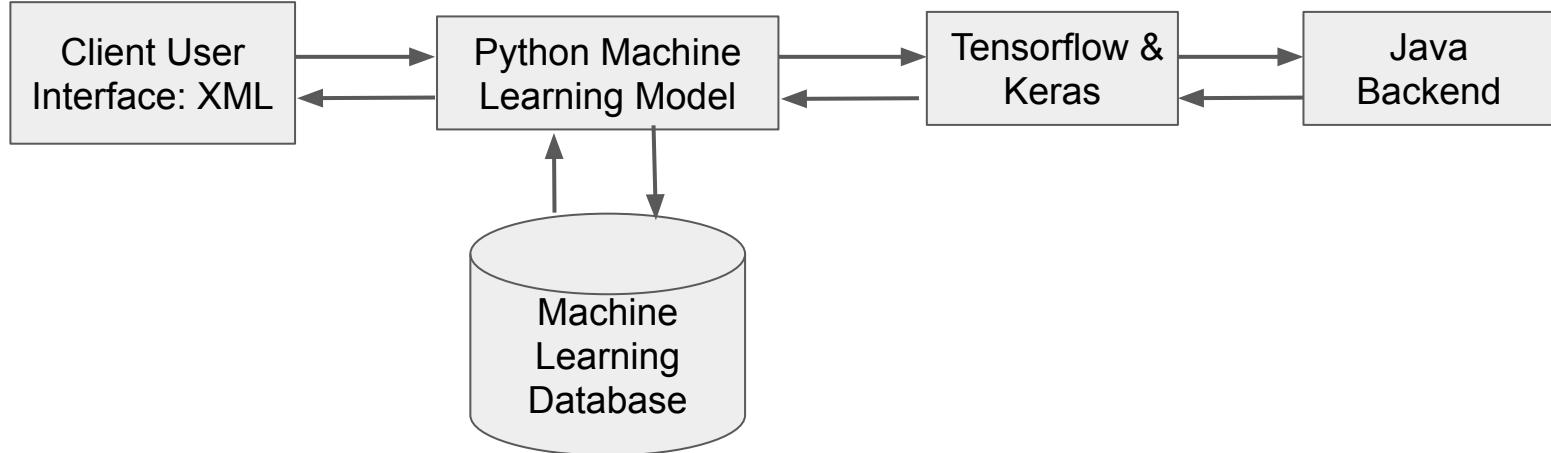


Android
Studio

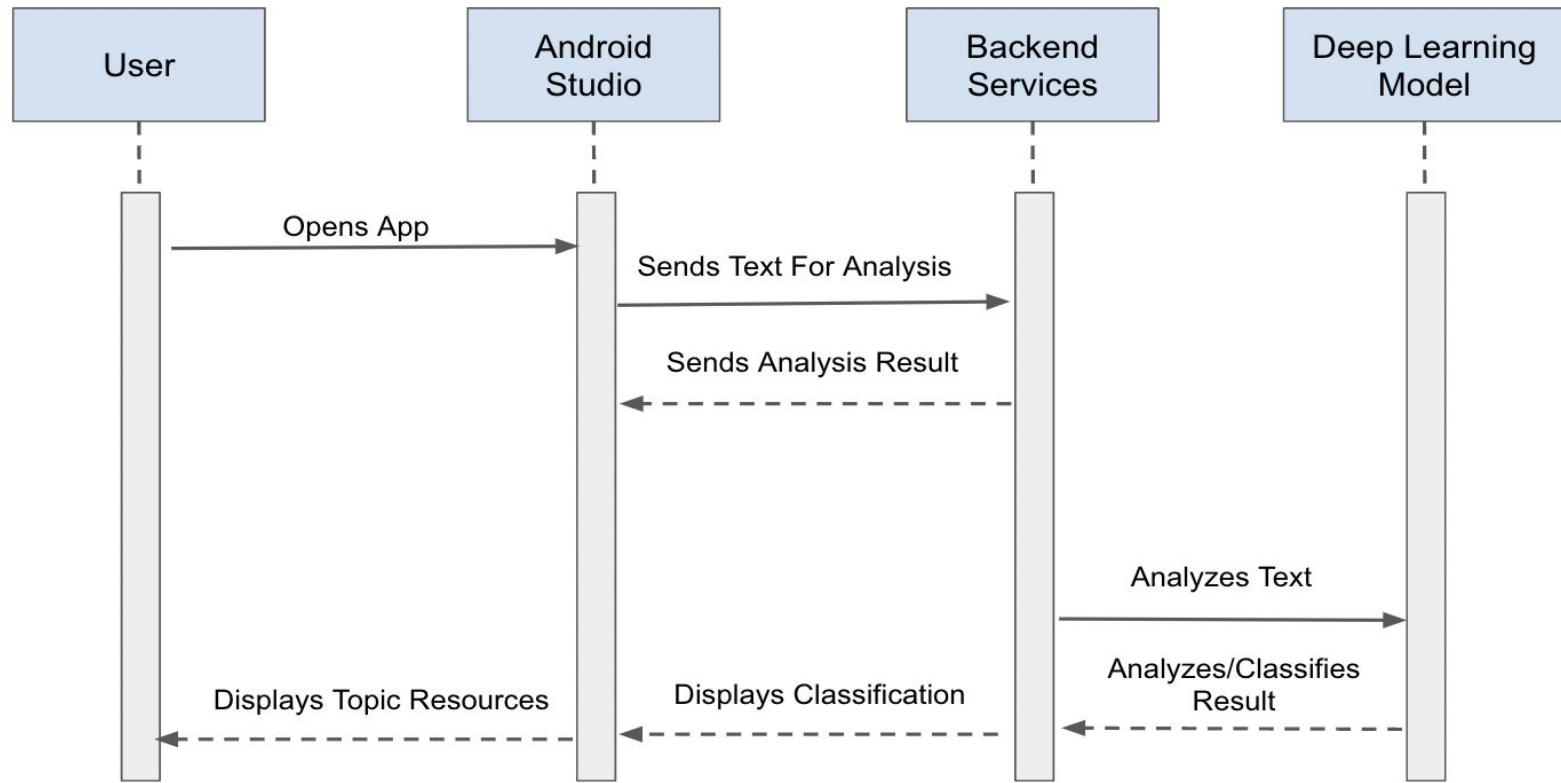


GitHub

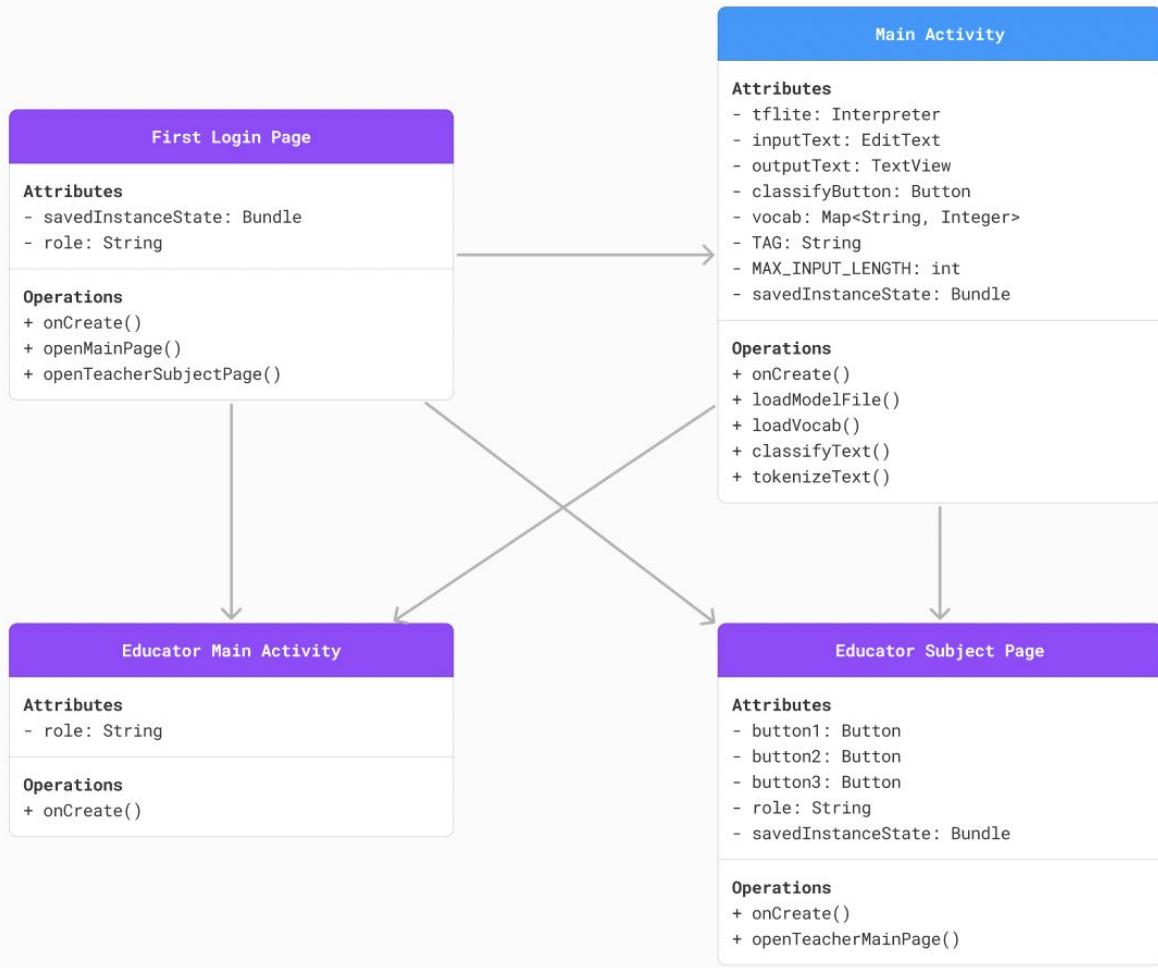
Conceptual Architecture Diagram



Sequence Diagram



Class Diagram



Sprint 2 Recap

Sprint_2_Sprint_Backlog					
Key	User Stories	Tasks	Owner/Assignee	Estimated Efforts (hours)	Status
MAPP-US1	As a student, I want to have a personalized learning path that targets my weaknesses and provides practices problems that are relevant, so that my understanding improves and the gaps of my knowledge are filled.	Finding relevant datasets that we can use to help students understand math concepts	Olivia		DONE
		Building the UI of the application to make it user friendly	Olivia		DONE
			▼		Placeholder
			▼		Placeholder
			▼		Placeholder
MAPP-US-7	As a teacher, have a platform that identifies the subject area of the problem to incorporate a variety of engaging and differentiated learning resources, so that I can cater to my students needs and personalized their learning goals.	Creating a model to train the data for classification	Xiaofeng		DONE
			▼		Placeholder
			▼		Placeholder
			▼		Placeholder
			▼		Placeholder
MAPP-US-13	As a tutor, I want to access diagnostic assessments that pinpoints the student's area of difficulty, so that I can create a personalized tutor session and support.	Creating a model to train the data for classification	Xiaofeng		DONE
			▼		Placeholder
			▼		Placeholder
			▼		Placeholder
			▼		Placeholder
MAPP-US14	As a tutor, I want to access learning resources that are engaging and diverse, so that explanations and practice problems can be tailored to the student's needs.	The classification identifies the student's homework problem so it is able to deliver tailored solutions.	Xiaofeng		DONE
			▼		Placeholder
			▼		Placeholder
			▼		Placeholder
			▼		Placeholder

Sprint 2 Recap

S2

- **Model Training**
Trained and tuned the model to increase the accuracy of prediction
- **Student User Login Page**
Page with a navigation button labeled student
- **Classification Page**
Student enter math word problem and the app determines the math course level

S3

- **MVP Completion**
Able to capture and categorize word problems, offers related learning materials, and tracks student performance.
- **Home Page**
Page with 2 navigation buttons labeled student (user), teacher (educator, includes tutor)
- **MAPP Dashboard Page**
Math problems entered are classified by math course level and related resources are displayed
- **Student Progress Page**
Student can view comments and/or feedback from teacher/tutor. Can view the history problem list and can set it to complete.

Product Backlog

Key	As a ...	I want to...	Tr so that	Priority	Story Point	Status	Sprint
MAPP-US1	Student	have a personalized learning path that targets my weaknesses and provides practices problems that are relevant,	my understanding improves and the gaps of my knowledge are filled.	Must Have	13	DONE	Sprint 2
MAPP-US2	Student	have practice problems that are interactive and engages me,	I can stay motivated and see improvement in my problem solving skills.	Must Have	8	DONE	Sprint 3
MAPP-US3	Student	have quick access to explanations and personalized, scaffolded help for challenging problems,	I have the confidence to tackle challenging problems and gain a deeper understanding the concept.	Must Have	5	DONE	Sprint 3
MAPP-US4	Student	have an app that allows me to access my learning path profile that includes all my current and saved progress,	I can practice my math lessons anytime and anywhere.	Should Have	3	DONE	Sprint 3
MAPP-US5	Student	have an app that integrates materials for my textbook and/or online platforms,	I can bounce form one learning tool to another within the app.	Could Have	2	In Progress	Sprint 3
MAPP-US6	Student	have an app that provides specific practice problems and exams that aligns with the SAT and Regents exams format,	I can place my focus on the content that I need to work on to fully prepare for the exams and gain confidence for them.	Could Have	1	DONE	Sprint 3
MAPP-US7	Teacher	have a platform that identifies the subject area of the problem to incorporate a variety of engaging and differentiated learning resources,	I can cater to my students needs and personalized their learning goals.	Must Have	13	DONE	Sprint 2
MAPP-US8	Teacher	have a platform that creates personalized learning paths for my students based on how they perform and grasp the content,	they can work on their weaknesses and increase their learning potential.	Must Have	8	DONE	Sprint 3
MAPP-US9	Teacher	have computerized tool that can monitor my students' progress in real-time and pinpoints the areas where my students' need extra support,	intervene in sooner than later in an effective way.	Must Have	5	DONE	Sprint 3

Product Backlog

Key	As a ...	I want to...	so that	Priority	Story Point	Status	Sprint
		areas where my students' need extra support,	way.				
MAPP-US10	Teacher	have resources and support that will help understand how to intergrate this platform into my classroom,	I can use it effectively in my lesson plans and teaching practices.	Should Have	3	In Progress	Sprint 3
MAPP-US11	Teacher	have extra tools that will allow my students to access more practice problems and personalized learning paths outside of the classroom,	they can reinforce what they learned in class or get extra support and do this at their own pace.	Should Have	2	DONE	Sprint 3
MAPP-US12	Teacher	be able to access resources that is aligned with Algebra 2 and Precalculus tests,	I can prepare my students fully for these exams.	Could Have	1	DONE	Sprint 3
MAPP-US13	Tutor	access diagnostic assessments that pinpoints the student's area of difficulty,	I can create a personalized tutor session and support.	Must Have	13	DONE	Sprint 2
MAPP-US14	Tutor	I want to access learning resources that are engaging and diverse,	explanations and practice problems can be tailored to the student's needs	Must Have	8	DONE	Sprint 2
MAPP-US15	Tutor	I want to be able to track the student's progress with homeworks and practice problems,	I can determine the area of concern and provide additional support.	Must Have	5	DONE	Sprint 3
MAPP-US16	Tutor	I want to tools that give students the chance to communicate with their teachers to asks questions and/or receive clarifications on certain topics during tutor sessions,	the student can take ownership of their learning	Should Have	3	In Progress	Sprint 3
MAPP-US17	Tutor	I want to have access to interactive learning activities,	I can increase the engagement and retention of the student.	Could Have	2	DONE	Sprint 3

Sprint 3 Backlog

Sprint_3_Sprint_Backlog				
Key	User Stories	Tasks	Owner/Assignee	Status
MAPP-US-2	As a student, I want to have practice problems that are interactive and engages me, so that I can stay motivated and see improvement in my problem solving skills.	Finding relevant resources with practice problems that are subject specific Develop code to link the resources to the resources page after classification	Olivia ▾ Xiaofeng ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾	DONE DONE Placeholder Placeholder Placeholder Placeholder
MAPP-US-3	As a student, I want to have quick access to explanations and personalized, scaffolded help for challenging problems, so that I have the confidence to tackle challenging problems and gain a deeper understanding the concept.	Finding relevant resources with practice problems that are subject specific Develop code to link the resources to the resources page after classification	Olivia ▾ Xiaofeng ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾	DONE DONE Placeholder Placeholder Placeholder Placeholder
MAPP-US-4	As a student, I want to have an app that allows me to access my learning path profile that includes all my current and saved progress, so that I can practice my math lessons anytime and anywhere.	Finding relevant resources with practice problems that are subject specific Develop code to link the resources to the resources page after classification	Olivia ▾ Xiaofeng ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾	DONE DONE Placeholder Placeholder Placeholder Placeholder
MAPP-US-5	As a student, I want to have an app that integrates materials from my textbook and/or online platforms, so that I can bounce form one learning tool to another within the app.	Finding relevant resources with practice problems that are subject specific Develop code to link the resources to the resources page after classification	Olivia ▾ Xiaofeng ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾ Placeholder ▾	DONE DONE Placeholder Placeholder Placeholder Placeholder
		Finding relevant resources with		

Sprint 3 Backlog

		Finding relevant resources with practice problems that are subject specific and prepare students for regents exams and SAT's	Olivia	DONE
MAPP-US-6	As a student, I want to have an app that provides specific practice problems and exams that aligns with the SAT and Regents exams format, so that I can place my focus on the content that I need to work on to fully prepare for the exams and gain confidence for them.	Develop code to link the resources to the resources page after classification	Xiaofeng	DONE
			Placeholder	Placeholder
			Placeholder	Placeholder
			Placeholder	Placeholder
MAPP-US-8	As a teacher, I want to have a platform that creates personalized learning paths for my students based on how they perform and grasp the content, so that they can work on their weaknesses and increase their learning potential.	Finding relevant resources based on student's learning needs.	Olivia	DONE
		Develop code to link the resources to the resources page after classification	Xiaofeng	DONE
			Placeholder	Placeholder
			Placeholder	Placeholder
			Placeholder	Placeholder
MAPP-US-9	As a teacher, I want to have computerized tool that can monitor my students' progress in real-time and pinpoints the areas where my students' need extra support, so that intervene in sooner than later in an effective way.	Finding a way for the application to monitor student's progress	Amélie	DONE
		Finding a way for the application to monitor student's progress	Olivia	DONE
		Finding a way for the application to monitor student's progress	Xiaofeng	DONE
			Placeholder	Placeholder
			Placeholder	Placeholder
MAPP-US10	As a teacher, I want to have resources and support that will help understand how to intergrate this platform into my classroom, so that I can use it effectively in my lesson plans and teaching practices.	Create online resource to help users with application	Amélie	In Progress
		Create online resource to help users with application	Olivia	In Progress
		Create online resource to help users with application	Xiaofeng	In Progress
			Placeholder	Placeholder
			Placeholder	Placeholder

Sprint 3 Backlog

MAPP-US-11	<p>As a teacher, I want to have extra tools that will allow my students to access more practice problems and personalized learning paths outside of the classroom, so that they can reinforce what they learned in class or get extra support and do this at their own pace.</p>	<p>Finding relevant resources with practice problems that are subject specific that students can work in independently with tutorials.</p> <p>Develop code to link the resources to the resources page after classification</p>	<p>Olivia</p> <p>Xiaofeng</p> <p>Placeholder</p> <p>Placeholder</p>	<p>DONE</p> <p>DONE</p> <p>Placeholder</p>
MAPP-US-12	<p>As a teacher, I want to be able to access resources that is aligned with Algebra 2 and Precalculus tests, so that I can prepare my students fully for these exams.</p>	<p>Finding relevant resources with practice problems that are subject specific and aligned to exams.</p> <p>Develop code to link the resources to the resources page after classification</p>	<p>Olivia</p> <p>Xiaofeng</p> <p>Placeholder</p> <p>Placeholder</p>	<p>DONE</p> <p>DONE</p> <p>Placeholder</p>
MAPP-US-15	<p>As a tutor, I want to be able to track the student's progress with homeworks and practice problems, so that I can determine the area of concern and provide additional support.</p>	<p>Finding a way for the application to monitor student's progress</p> <p>Finding a way for the application to monitor student's progress</p> <p>Finding a way for the application to monitor student's progress</p>	<p>Amélie</p> <p>Olivia</p> <p>Xiaofeng</p>	<p>DONE</p> <p>DONE</p> <p>Placeholder</p>
MAPP-US-16	<p>As a tutor, I want to tools that give students the chance to communicate with their teachers to asks questions and/or receive clarifications on certain topics during tutor sessions, so that the student can take ownership of their learning</p>	<p>Finding a way for the application to monitor student's progress</p> <p>Finding a way for the application to monitor student's progress</p> <p>Finding a way for the application to monitor student's progress</p>	<p>Amélie</p> <p>Olivia</p> <p>Xiaofeng</p>	<p>In Progress</p> <p>In Progress</p> <p>Placeholder</p>
MAPP-US-17	<p>As a tutor, I want to have access to interactive learning activities, so that I can increase the engagement and retention of the student.</p>	<p>Finding relevant resources with practice problems that are subject specific and interactive for the student.</p> <p>Develop code to link the resources to the resources page after classification</p>	<p>Olivia</p> <p>Xiaofeng</p> <p>Placeholder</p> <p>Placeholder</p>	<p>DONE</p> <p>DONE</p> <p>Placeholder</p>

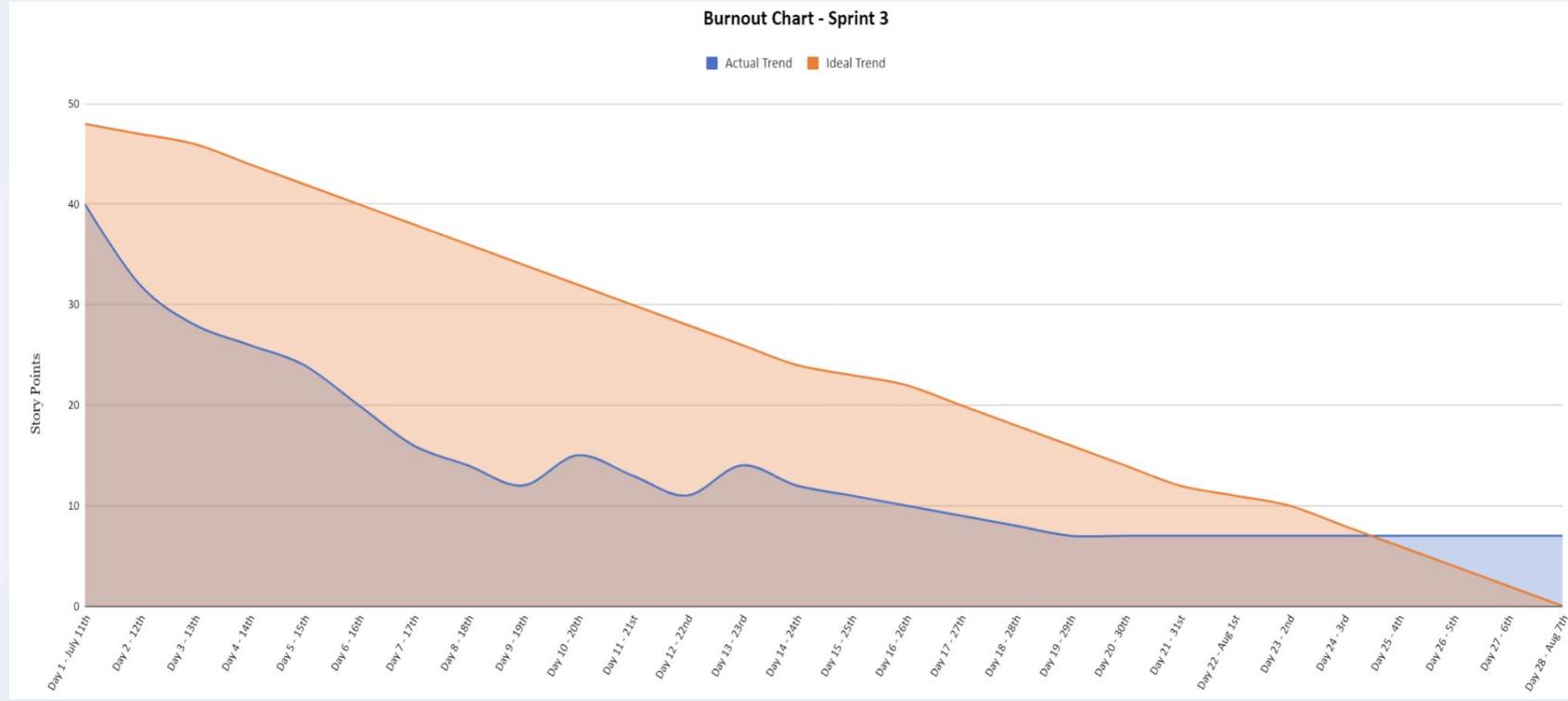
Test Cases

Test Key	Key	Test Scenario	Test Case	Test Steps	Test Data	Expected Result	Actual Results	Pass/Fail
TC-MAPP-US3	MAPP-US3	Student accessing resource with explanations and scaffolded help to understand their homework	Enter math problem	<ol style="list-style-type: none"> 1. Login as student. 2. Enter math problem 3. Click "Submit your problem" 4. Choose resource with scaffolded example problems 	Practice problem with appropriate learning level settings	Student should be able to enter a math problem, receives an explanation of the relevant concept, and should be able to access the scaffolded problems to help them to understand and solve the problem.	Mapp identified math problem and classified it appropriately, provided learning resources, and practice problems	Pass
TC-MAPP-US4	MAPP-US4	Student accessing their learning path profile with saved progress	Verify learning path profile	<ol style="list-style-type: none"> 1. Login as student. 2. Click "Submit your problem" 3. Click "Learning Path" section 	<ol style="list-style-type: none"> 1. Valid student account 2. Student saved progress 3. Student's learning path 	The profile should display student's complete learning path with progress trackers for each activity.	Track and monitors students' progress	Pass
TC-MAPP-US5	MAPP-US5	Student is accessing and switching between learning materials from my textbook and online platforms within the app	Verify the teacher can switch from one platform to another	<ol style="list-style-type: none"> 1. Login as student. 2. Click "Submit your problem" 3. Click "Textbook" or "Learning Platform" section 4. Choose practice problems 	<ol style="list-style-type: none"> 1. Valid student account 2. Connection to textbook and school learning platform 	<p>Student should be able to access the learning resource page (textbook or online platform) and select specific practice problems.</p> <p>Student should also be able to switch back to choose problems from the other resource within the app.</p>	Student are able to access the learning resource but not able to switch between different content	Fail
TC-MAPP-US6	MAPP-US6	Student accessing problems that align with the SAT or Regents	Enter SAT or Regents math problem	<ol style="list-style-type: none"> 1. Login as student. 2. Click "Submit your problem" 3. Choose practice problem 4. 	<ol style="list-style-type: none"> 1. Valid student account 2. Valid SAT or Regents practice problems 	Student should be able to choose a practice problem category aligned with SAT/Regent	Student are able to access aligned standardized practice problems	Pass

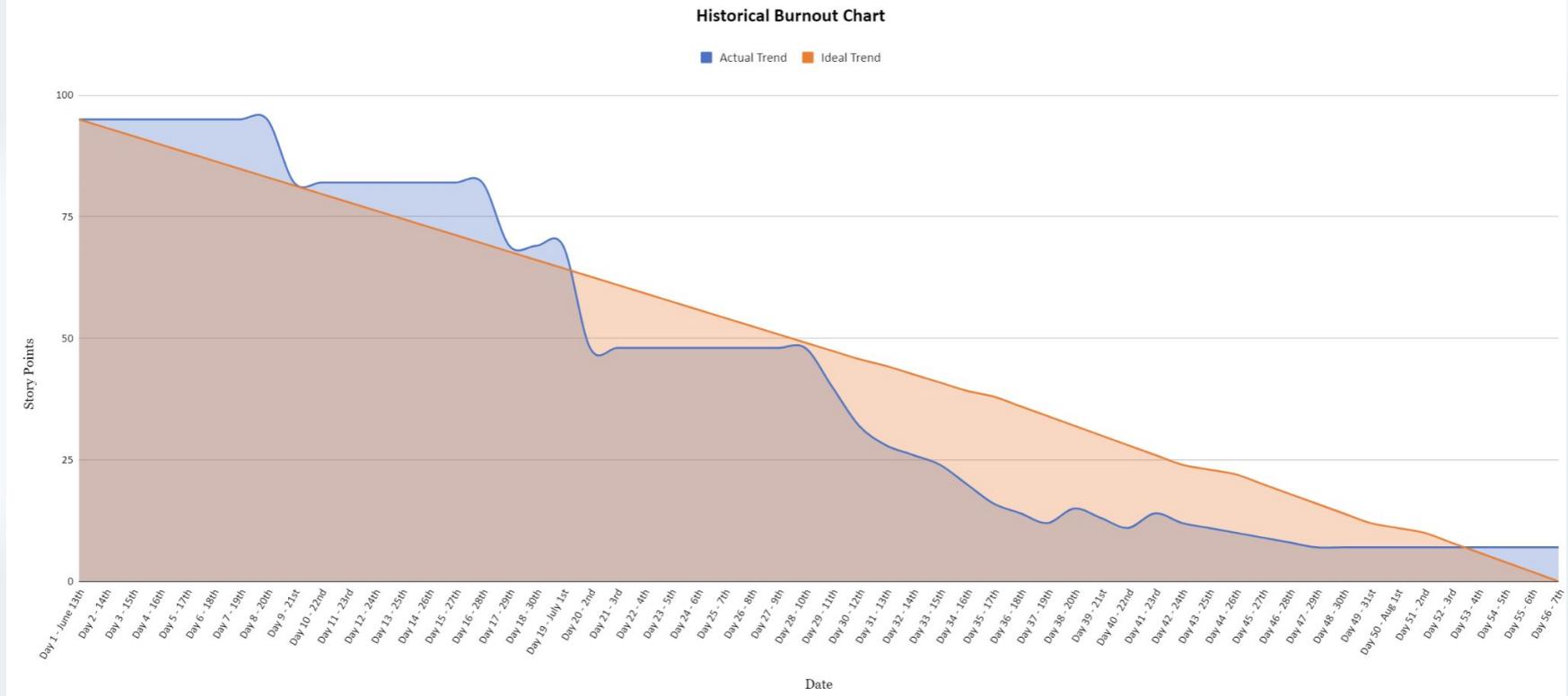
Test Cases

Test Key	Key	Tr Test Scenario	Tr Test Case	Tr Test Steps	Tr Test Data	Tr Expected Result	Tr Actual Results	Pass/Fail
TC-MAPP-US8	MAPP-US8	Teacher is able to create personalized learning paths for the students based on their performance.	Verify personalized learning path	1. Login as teacher. 2. Click "Generate Learning Path" 3.	1. Valid teacher account 2. Valid student profile 3. Student's learning path	Teacher should be able to use the system to generate personalized learning paths for students.	The students are able to get targeted resources but the application does not provide personalized learning path.	Fail
TC-MAPP-US9	MAPP-US9	Teacher is able to monitor student's progress	Verify the teacher can view student's progress in real time	1. Login as teacher 2. Click "Choose student profile" 3. Click "Student progress" 4.	1. Valid teacher account 2. Students completed assignments (correct or incorrect)	The teacher should be able to access student profiles, navigate to the "Student Progress" section, and view a clear breakdown of completed homework and practice problems.	The teacher will be able to monitor students' progress	Pass
TC-MAPP-US10	MAPP-US10	Teacher is able to access support resources for tutorials/professional development	Verify that teacher can access PD resources	1. Login as teacher. 2. Click "Teacher's Resources" 3.	1. Valid teacher account 2.	The application provides professional development resources	The application hasn't tested this feature	Fail
TC-MAPP-US11	MAPP-US11	Teacher is able to access practice problems while monitoring student's progress	Verify that teacher can assign practice problems and track student progress on personalized learning paths.	1. Login in teacher. 2. 3.	1. Valid teacher account 2.	The teacher is able to view the content area problems that student is struggling with	Teacher is able to monitor students' progress and identified what the student is struggling with	Pass
TC-MAPP-US12	MAPP-US12	Teacher is able to view test-aligned resources (Alg2 Trig and Precalc)	Verify that teacher can access specific aligned resources designed for the standardized tests	1. Login in teacher. 2. 3.	1. Valid teacher account 2.	The application should allow the teacher to view the aligned-test resources that the students can see	Teacher can view test-aligned resources that the students see	Pass
TC-MAPP-US15	MAPP-US15	Tutor is able to monitor student's progress	Verify that the tutor can view student's progress (homework and practice problems)	1. Login as tutor 2. Click "Choose student profile" 3. Click "Student progress" 4.	1. Valid tutor credentials 2. Students completed assignments (correct or incorrect)	The tutor should be able to access student profiles, navigate to the "Student Progress" section, and view a clear breakdown of completed homework and practice problems.	The tutor will be able to monitor students' progress	Pass
TC-MAPP-US16	MAPP-US16	Tutor is able to receive student's questions and teacher's clarifications	Verify functionality for receiving questions asked and clarifications	1. Login as tutor 2. 3.	N/A	N/A	The application hasn't tested this feature	Fail
TC-MAPP-US17	MAPP-US17	Tutor is able to view student's interactive learning activities	Verify functionality for accessing and utilizing learning activities	1. Login as tutor 2. Click "Choose student profile" 3.	1. Valid tutor creds 2. Student account 3. Valid interactive activities	The tutor should be able to log in, access a list of assigned students, select a student, and launch and interact with the chosen interactive learning activity within the student's lesson plan.	Tutor is able to view student's interactive progress activities	Pass

Metrics



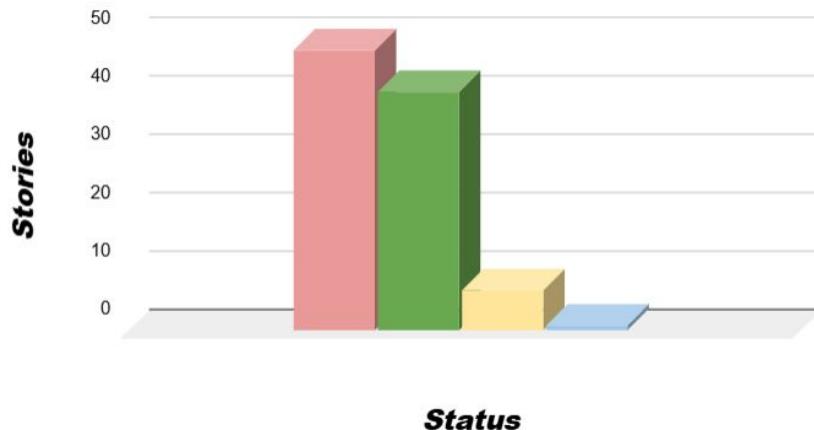
Metrics



Metrics

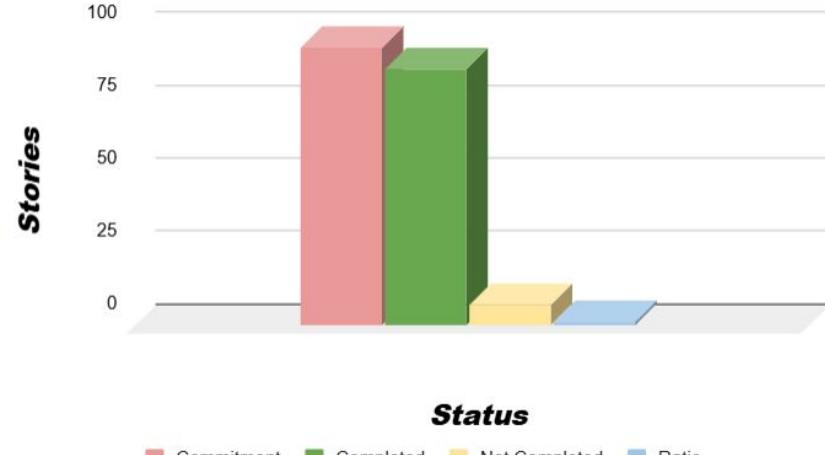
	Velocity Metric				Ratio	
	Status					
	Commitment	Completed	Not Completed			
Sprint 3	48	41	7	85.42%		

Team Velocity - Sprint 3



	Velocity Metric				Ratio	
	Status					
	Commitment	Completed	Not Completed			
Historical	95	88	7	92.63%		

Team Velocity - Historical



Retrospective

Retrospective - Sprint 3

What went well?

What can we do better?

Actions for the next sprint

Weekly zoom meets - productive; where we talked about what was done, changes to make, and next steps.

multiple check-ins via Discord

We could have allocated more time for testing checks throughout our earlier meetings

We still don't have image recognition

Build in more time for testing/quality checks throughout application building

Find or create tutorials/help resources for teacher professional development for the app

The new problem list page

Effective communication within the group

While the app was being created, we could have done it via Zoom in a collaborative way

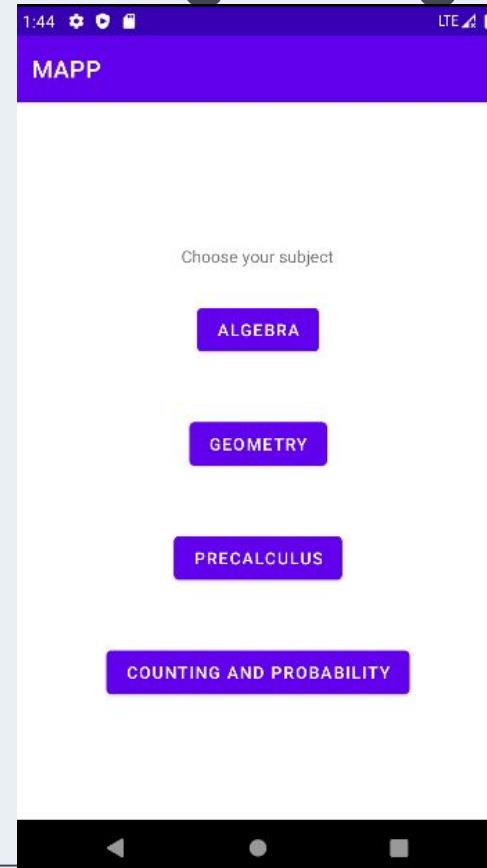
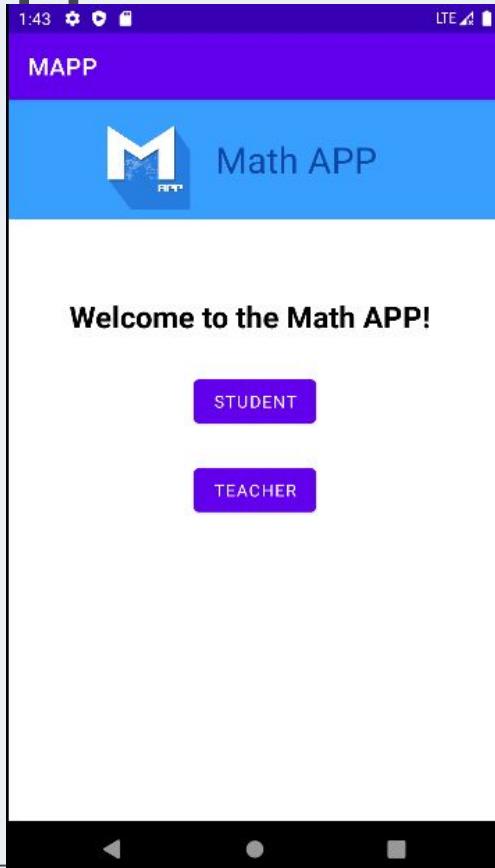
There can be more math subjects available

Technical paper done by 2 members - divvied up by sections

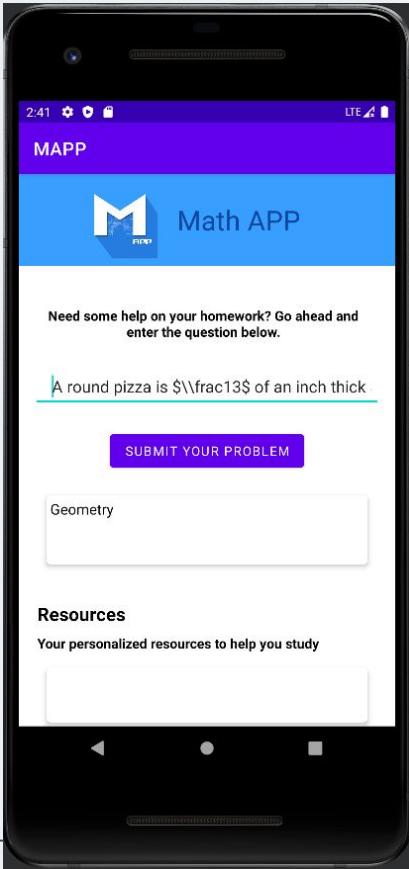
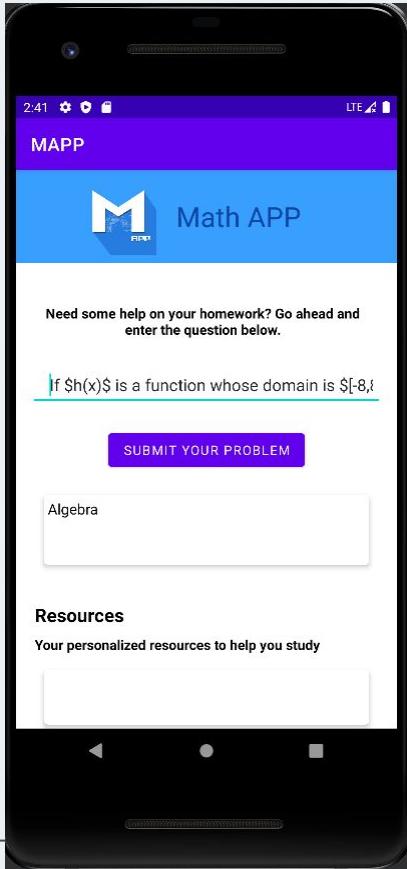
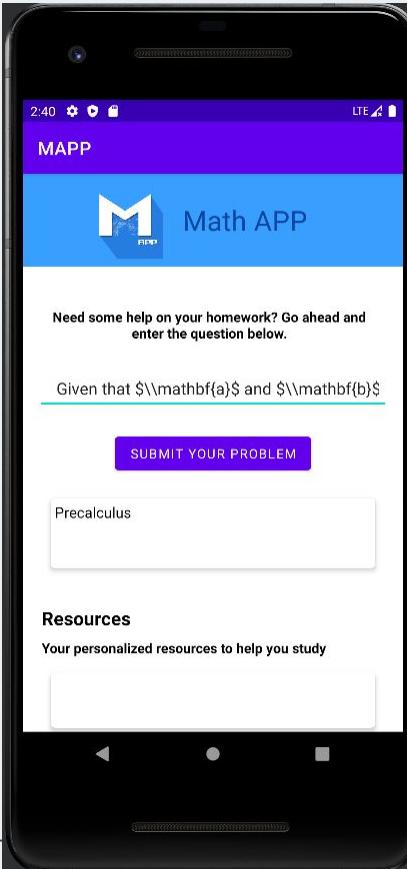
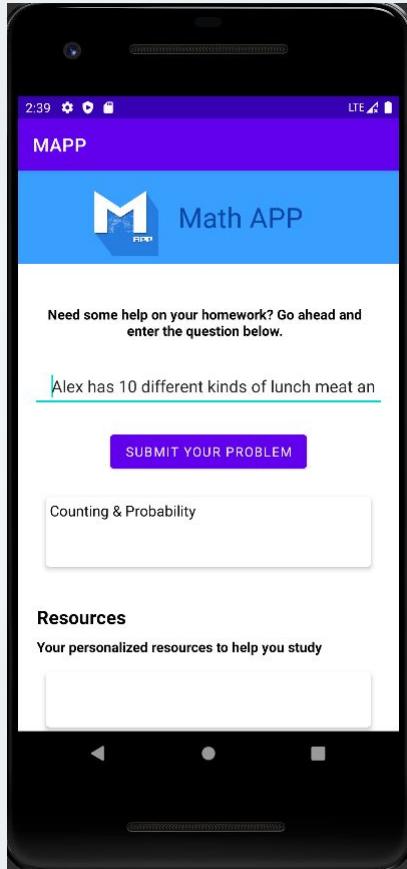
Providing feedback to each other in a timely manner

Could have seen the app in action in order to give feedback in realtime

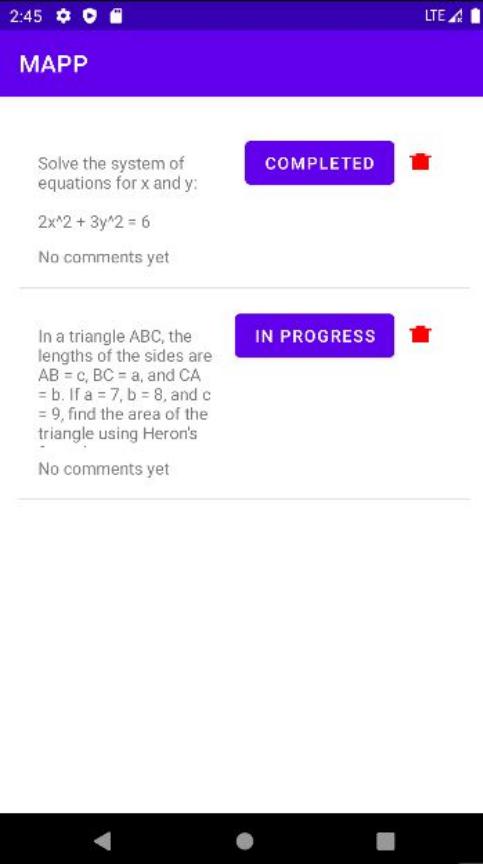
Application Screenshots - Login Page



Application Screenshots- Classification



Application Screenshots- Problem List



Live Project Demo



We will now present a live demo
of our application.

Wiki Page Link

<https://github.com/htmw/Educators-Assembled/wiki>

Educators-Assembled - Pace Capstone Project 2024



Project Description

The Math APP provides instant access to targeted resources, helping students tackle math problems effectively and offering educators insights into student growth and struggles.

For students who struggle with understanding and solving homework problems independently, and teachers and tutors who need support with responsive pedagogy through technology, the Math APP is a smart homework assistant and educational tool. It identifies the topic of math problems through real time camera input, provides step-by-step solutions and valuable resources such as model problems and interactive tutorials.

The Math App caters to students requiring real-time educational resources and educators aiming to better gauge their

Pages 1

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- CS691 - Summer 2024 Deliverables
- Presentations (Sprint Reviews)