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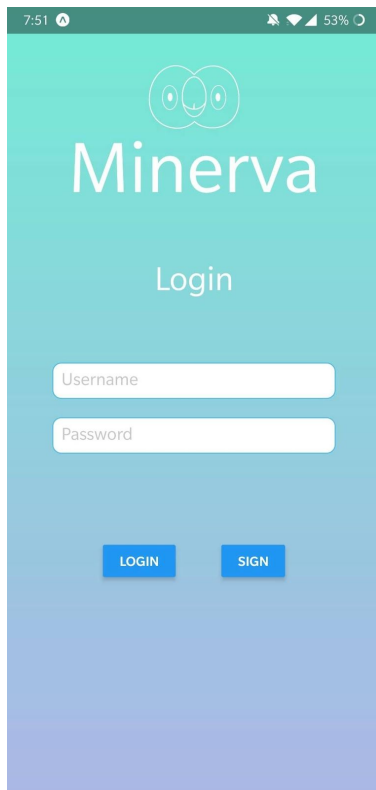
Professor Marsic

Software Engineering

25 March 2019

User Documentation

All Users (mobile application):



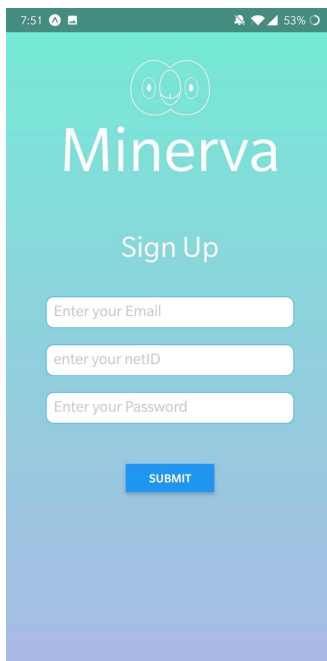
The screen to the left is the first page that all users will be met with when Minerva is launched.

1. Users who already have registered can login by entering valid login information in the 'username' and 'password' fields and pressing login.

- a. If the user enters a username that is not registered in the database, an error message will appear letting the user know that the username is not registered

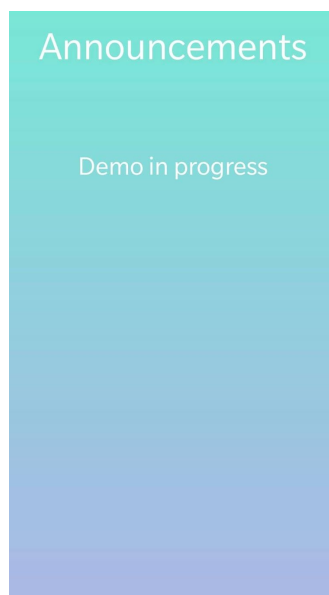
- b. If the user enters a valid username but an incorrect password, an error message will appear letting the user know that the password is incorrect.

2. Users who have not registered can click on the 'sign' button, which will redirect the user to a new page outlined in the next image.



When a user chooses to register a Minerva account by clicking on 'sign' from the first login page, this is the new page that will appear. By entering a valid email, netID, and password and pressing 'submit', the user will now be registered in the database and the user will be redirected to the first login page.

1. If a user enters an email and/or netID that is already registered in the database, an error message will appear letting the user know that the email and/or netID is already in use.

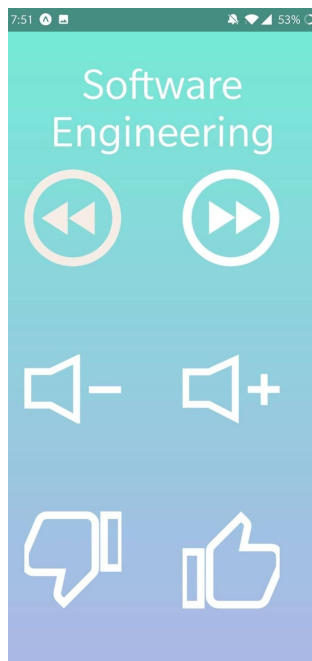


Once a user has successfully logged in, the screen to the left will be subsequent page the user will first see. On this page any announcements teaching assistants and/or professors have made will appear here.

On the bottom navigation bar, we can see 5 additional buttons along with the 'home' button which currently hosts the announcements page: Feedback, Sign Up, Login, Question, and Quiz. Pressing any of these buttons will redirect the user to the corresponding page.

For future improvements on this page, we plan to eliminate the 'Sign Up' and 'Login' buttons since both of these pages should only be accessible when either a user logs out from Minerva or is launching the app. Currently they only exist as a testing feature. Routing will be

fixed in the final version of the app.



The screen to the left represents the feedback page that can be navigated to on the 'feedback' button on the navigation bar. Here we can see 6 icons: A rewind, fast forward, quieter sound, louder sound, thumbs down, and a thumbs up icon. Each represents a general feedback that is meant to be given to the professor once a threshold is met with enough students pressing an icon.

1. Rewind - Meant to be used when the professor or teaching assistant is talking too fast
2. Fast forward - Meant to be used when the professor or teaching assistant is talking too slowly

3. Quieter sound - Meant to be used when the professor or teaching assistant is talking too loudly
4. Louder sound - Meant to be used when the professor or teaching assistant is talking too quietly
5. Thumbs down and Thumbs Up - Meant to be used when the professor is looking for a yes or no from the students (e.g. Does everyone understand how I did the problem?)

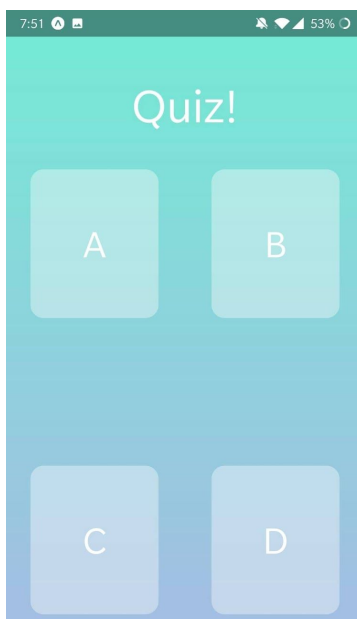


The screen to the left represents the questions page that can be navigated to on the 'questions' button on the navigation bar. Here we can see questions that can be submitted by students with an orange arrow pointing up and a blue arrow pointing down.

The purpose of this page is to give each student the ability to anonymously pose questions that can be seen by the professor if enough students agree that the question should be asked. Students express their opinions on whether or not the question should be answered by clicking on either the up or down arrow:

1. If the student believes that a question should reach the professor, he or she can press the up arrow. This action is called "upvoting".
2. If the student believes that a question is irrelevant and should not reach the professor, he or she can press the down arrow. This action is called "downvoting".

3. Once a question has reached a threshold of "upvotes" in comparison to its "downvotes", the question will be sent to the professor's web application for viewing.



The screen to the left represents the quiz page that can be navigated to on the 'quiz' button on the navigation bar. Here we can see 4 buttons labeled 'A', 'B', 'C', and 'D', each corresponding to an answer of a multiple choice quiz.

The purpose of this page is for students to be able to take quizzes administered by professors, where the question and multiple choice answers will be presented on the professor's web page of Minerva.

Website

Professor/TA: A user that is set as a professor a teaching assistant can log on and access the following features by clicking on its link on the side bar: Create Quiz, View Announcement. The sidebar is persistent throughout all pages.

1. When View Announcement is clicked, a page displays all announcements made with the newest one on top. Additionally buttons to delete any announcement appears to the left of the text that when clicked deletes the announcement in the UI and the database. A button above all the announcements to create a new announcement that opens the new announcement page. Future Improvements for this page:
 - a. Add a “delete an announcement” button that will make the current delete announcement buttons next to each announcement appear. This will prevent accidental deletes.
 - b. Add user and dates to announcement. For more information
 - c. Overall UI improvements.
2. When Create Announcement is pressed, a page that displays a simple textbox appears to type in an announcement. The user write the announcement and submit when done. The current save button does not work. Future Improvements for this page:
 - a. Save Feature
 - b. UI improvements
3. When Quiz is chosen, the page will show two sections: one section is for past quizzes that the user can edit and the other section allows the user to make a new quiz. Old

quizzes are displayed by name but are stored by ID, which means that the user can make multiple quizzes of the same name and the program will be able to differentiate them. Let's say the user chooses to edit an old quiz. The "create quiz" page will show with prepopulated questions and answers based on the stored results. If the user were to instead decide to make a new quiz, then they would have a blank template page displayed. In both scenarios, the user is able to submit the quiz which saves or overwrites the data in the database, allowing other features to now access that quiz data. Future improvements are:

- a. Edge case handling. For example, throwing errors if the user tries to submit empty questions or answers
- b. A save button that allows the user to save the data without publishing the quiz
- c. UI improvements

Student: A user registered as student will be able to view their grades, view and create forum posts, and take quizzes assigned to them by using the navbar to the side, which expands when the mouse hovers over the edge. The navbar is persistent throughout all pages.

1. Forum: When the forum link on the navbar is clicked, the page initially displays the title of all forum threads as links to each full thread. Clicking on any link will take the user to view the full thread on that topic. However if the user is able to filter the forum posts by typing in the search bar and clicking search. If any thread title contains the text entered, only links to those threads will be displayed. There is a small tag to the right side of the main page that, when hovered over, expands into a larger window that allows the user to type a thread title, the first thread post, and submit that post to the forum. If the page is refreshed, the thread will show up in the forum page. Future improvements:
 - a. Being able to delete a thread or post the user created
 - b. Being able to sort by criteria other than title
 - c. Add dates of when the post was made
2. Grades: When the grades link on the navbar is clicked, the page will show a collapsed tree showing each class the user is currently registered to. Clicking the plus sign next to any class will expand it and show the users grades for that individual class. That specific grade box can be collapsed by clicking the minus sign next to the class name. Future improvements:
 - a. Being able to view professor feedback
 - b. Being able to see the actual assignment in the grade box
3. Take Quiz: When the quiz link on the navbar is clicked, the page will show all quizzes available to take on the top of the page. Any quiz can be selected, which starts a timer in the top left corner. The user is able to select the multiple choice answers to the quiz and

click submit at the bottom of the page, in which case the results of the quiz will be sent to the database and the user will be sent back to the main quiz screen. Future improvements:

- a. Being able to view immediate quiz feedback
- b. Being able to enter short answers during quiz