

Penn Course Review Android Application - Final Report

CIS350 - Software Engineering & Design

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Project repository: <https://github.com/jinatonic/Penn-Course-Review-Mobile-Beta>

- List of user stories completed in this iteration:
 - User wants to login and authenticate him/herself with serial number via Pennkey Login/Authentication (**2 points**)
 - User wants to change/clear data and cache in Settings Page (**1 point**)
 - User wants to view detailed ratings for a particular course (**2 points**)
 - User wants to add a certain course to his/her Favorites (**1 point**)
 - User wants to change the ratings displayed on the main results page (**2 points**)
 - User can differentiate between dept, course, and instructor in the autocomplete via different colors (**1 point**)
 - User can add courses to his Recent, Favorite, or go back to a previous page, to go the Settings page, or quit through the Menu (**2 points**)
 - User can go into individual courses listed under department and instructor result pages (**1 point**)
- Calculation of project velocity (if less than three points per person, explain why):
 - 3 points/person
- For user stories that were planned but not finished, explain why:
 - We finished all of the user stories that were planned for the final iteration.
- Describe any known bugs in the application, and how we plan on fixing them:
 - As far as we can tell from both using the app and through testing, there are no known bugs.
- For any untested code, explain why:
 - As before, we didn't write unit tests for any of our Activity classes because we found it much easier to hand-test all of them. We also made the decision that it would be more efficient if we spend more of our time trying to knock out new features before the final demo instead of writing tests for existing Activities that worked fine in simulation. Unit tests are much more fitting for testing helper classes and DB access classes, which we did write unit tests for.
- Potential Additional Features
 - If we had more time with this project, there are a few features that we would have liked to add. One such feature would have been visualizations of the progression of a course or professor through time. This visualization would be displayed in the form of a line graph. In addition, we would have liked to have side-by-side comparisons, but due to the limited screen size of a mobile phone, this feature would only be feasible if we had a tablet version of our application.
- What would you do differently?
 - We would probably spend more time planning out the structure of our code, the different activities needed, the layout of the User interface, and the interactions between different background threads before coding. On several occasions we had to backtrack and rewrite a portion of the code because we didn't think about all of the cases properly, or we didn't research enough about a certain area of

Android programming (e.g. our Display class was written entirely because we didn't write the original class with changing rating fields to show up in the table as an option in mind).

- Would you work with this customer again?
 - Yes. PennApps Labs, and more specifically Amalia and Kyle were great to work with because they provided us with all the information we needed in order to complete the project. They also had a clear sense of what they wanted the project to be and did not make any major changes along the way. They were also very supportive especially because of their technical knowledge so they were very aware and understanding of the technical challenges we faced along the way.
- Is it okay to release our code?
 - Yes
- EC Changes
 - We actually refactored a lot of our code before receiving the feedback from the other team. We already refactored all of the methods in Display class, such as printReviews and covered most of the points that the other team pointed out. We also covered some of the points in checkAutocomplete to make the queries go a little faster (and also removed DEBUG messages in the natural cleanup process). So, by our code inspection meeting, the majority of our code had already been refactored to eliminate the code smells pointed out by the other team.