

Sprint 2

CSCI-310 Software Engineering

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Preface

This document outlines the our daily Scrum meetings for the second sprint for the Android application "Sanity." The document is intended for the software engineers who developed the system as well as the stakeholders who will be reviewing our scrum process.

Daily Scrums

Meeting Dates:

1. Date: 11/10/17

Time: 5:30 PM - 6:10 PM

Location: Seaver Science Library

Tri Nguyen:

- **Yesterday:** Planned out what to do in the current sprint.
- **Today:** Look into notifications and analytics to see how to accommodate multiple budgets.
- **Problems:** Implementing multiple budgets may make the app unusable for a while.

Ang Li:

- **Yesterday:** I created a list of tasks we need to do in order to implement multiple budgets and shared it with the rest of the group. For example we need to refactor our class names from Budget to Category and BudgetManager to Budget.
- **Today:** I will work on the UI screen that displays all the budgets of a user. The user will be taken here instead of the old MainMenu. The old MainMenu
- **Problems:** Once we implement the multiple budgets our entire app will be untestable until the database catches up with the changes.

Utsav Thapa:

- **Yesterday:** Looked over the database class, started refactoring some code.
- **Today:** Refactored some older code, and started writing updated code.
- **Problems:** Refactoring the entire database.

Andre Takhmazyan:

- **Yesterday:** Planned out what needed to be refactored for the changing process for multiple budgets.
- **Today:** Refactor the names for all our classes for the coming change to multiple budgets.
- **Problems:** Making sure all the names are correct while refactor a large amount of text.

Kevin Nguyen:

- **Yesterday:** Nothing since we had not yet started the current sprint.
- **Today:** Adding an email field to the User class, adding an email input field, redesigning authentication logic with the new email field in mind.
- **Problems:** Refactoring existing functionality is tricky to get right the first time without encountering any bugs.

2. Date: 11/13/17

Time: 6:30pm - 7:00pm

Location: Discord

Tri Nguyen:

- **Yesterday:** Pulled changes from other team members to start working on multiple budgets.
- **Today:** Implement a reminder system that will allow users to set a one-time reminder message to appear at a certain point in the future.
- **Problems:** Program may have many crashes while multiple budgets are being implemented.

Ang Li:

- **Yesterday:** I began working on the UI for the new main menu with multiple budgets. I created a special button in login to test BudgetManager functionality while our database is being upgraded. The menu shows multiple budgets, allows creating and deleting budgets. However, nothing is saved in the database.
- **Today:** I will continue to work on the UI. The Budget class needs to be changed so it is no longer a singleton.
- **Problems:** Currently, we cannot log in normally because there is some error adding an email to the database.

Utsav Thapa:

- **Yesterday:** Refactored more code, and wrote some new function.
- **Today:** Write more function and implement Gets.
- **Problems:** Need to modify so things work in the database.

Andre Takhmazyan:

- **Yesterday:** Refactored the names for all our classes for the coming change to multiple budgets.
- **Today:** Add the backend functionality to the new screen that will be added because of the budget change.
- **Problems:** Designating which tasks to split with the other UI team members.

Kevin Nguyen:

- **Yesterday:** Added email field to User class and to the sign up forms. Added validation checks to form fields.
- **Today:** Check to see how to send an email to user in the event of a notification.
- **Problems:** Need to be careful updating the schema of the database and ensuring all check/comparator methods accept the added email field.

3. Date: 11/14/17

Time: 9:00 PM - 10:00 PM

Location: Discord

Tri Nguyen:

- **Yesterday:** Worked on reminder class for users to set reminders for each budget.
- **Today:** Continue working on reminders and work with Utsav to integrate reminders into the database.
- **Problems:** Database may take a while to get up to speed considering all of the other changes it is undergoing.

Ang Li:

- **Yesterday:** I kept working on the UI for MainMenu and BudgetMenu.
- **Today:** I will add dynamic buttons to the menu screens so that it only begins with one button at the bottom. When the user selects budgets or categories for deletion, a new button to cancel deletions will pop up.
- **Problems:** We should avoid adding buttons later because then we would be undoing work.

Utsav Thapa:

- **Yesterday:** Added Set functions in database and added some unit tests.
- **Today:** Implement Get so we can access data in the database.
- **Problems:** Testing and making sure that nothing crashes.

Andre Takhmazyan:

- **Yesterday:** Added the backend functionality to the new screen that will be added because of the budget change.
- **Today:** Work on getting the log in to work and the new database functions.
- **Problems:** There is just a significant amount of work to refactor the code and it can get overwhelming and getting lost in the code.

Kevin Nguyen:

- **Yesterday:** Looked into sending an email from the android application to the user.
- **Today:** After realizing that sending email through the app is not feasible, we decided to scrap the idea and instead pursue other issues with app infrastructure and architecture.
- **Problems:** Giving up on an idea is not an easy thing to do, especially when it is a neat idea.

4. Date: 11/15/17

Time: 7:00 PM - 8:10 PM

Location: Discord

Tri Nguyen:

- **Yesterday:** Wrote up reminders class and supporting functions in alarmReceiver, reminders should be able to be created, deleted, and rescheduled
- **Today:** Test reminders to see if the functionality works
- **Problems:** Reminders currently have many methods that are untested so bugs are likely to occur

Ang Li:

- **Yesterday:** I implemented dynamic buttons and a popup screen for deleting budgets. I also changed delete budgets so that it changes by name rather than position.
- **Today:** I will start working on a UI for the Reminders. Another bug I need to fix is that going back from the Main Menu will result in resuming in the Budget Menu. This happens even if the user never goes to the Budget Menu.
- **Problems.** I haven't yet found the cause for the incorrect resume bug.

Utsav Thapa:

- **Yesterday:** Implemented Getters in the database, for easier access, also added a few more helper function.
- **Today:** Add more setters and getters for easier access to data.
- **Problems:** Major refactoring within the case

Andre Takhmazyan:

- **Yesterday:** Worked on getting the log in to work and the new database functions.
- **Today:** Work on getting reminders to work in the back end and more UI changes to the new screens.
- **Problems:** Major app functionality change means a lot of code refactoring.

Kevin Nguyen:

- **Yesterday:** Created and added a logo to the login screen, replaced old database calls in Budget and BudgetManager classes with the new methods.
- **Today:** Working on UI/UX changes and ensuring general system functionality and reliability. Perhaps changing the login logo to an animated SVG.
- **Problems:** Importing an image into the android app took a lot longer than it should have.

5. Date: 11/17/17

Time: 8:00 PM - 8:15 PM

Location: Discord

Tri Nguyen:

- **Yesterday:** Worked on reminders and also looked at notifications, contacted Utsav about the notifications not working
- **Today:** Test reminders to verify that they work and see if they need any extra functionality

- **Problems:** Notifications and reminders are difficult to test because they require changing the time and date on the phone.

Ang Li:

- **Yesterday:** I fixed the bug with resuming. I created a Reminder Menu to show all reminders. I implemented create Reminder using the previous Reminder Screen.
- **Today:** I will continue working on the Reminder Screen and allow deleting of reminders and formatting the reminder info.
- **Problems:**

Utsav Thapa:

- **Yesterday:** Work on fixing the notification, and added few more changes to the database.
- **Today:** Add delete to the reminders as well as as check reminder name.
- **Problems:** Work on the database and add helper function for remainder, as well as change the database table.

Andre Takhmazyan:

- **Yesterday:** Worked on getting reminders to work in the back end and more UI changes to the new screens.
- **Today:** Add new inputs for reminders such as title and being able to repeat reminders and general bug tests.
- **Problems:** Thinking of new functionality to add to the app.

Kevin Nguyen:

- **Yesterday:** Changed the app icon(s) and notification icon to the brain icon. Added regex email validation for signup screen.
- **Today:** Adding form validation error handling to newly added input fields, namely budget name and remind title.
- **Problems:** Not really a front end guy so fumbling around with app assets takes a little bit of time.

6. Date: 11/19/17

Time: 8:00 PM - 8:20 PM

Location: Discord

Tri Nguyen:

- **Yesterday:** I tested the reminder notifications, the notifications did not seem to work although the normal notifications work.
- **Today:** Test and fix the Reminders using the Reminder Menu screen.
- **Problems:** Issues with the reminders can come from a variety of sources.

Ang Li:

- **Yesterday:** I finished the Reminder Menu Screen. I implemented deleting reminders in the database. I also made the database save isRepeat for reminders.
- **Today:** I will sort the reminders so that the oldest reminder will be shown first. I will continue to test for bugs.
- **Problems:** I don't foresee any problems as we are on schedule. However, there is always a chance for unexpected bugs.

Utsav Thapa:

- **Yesterday:** I finished up the all the functions in database class.
- **Today:** I am going to bug test and make sure everything works.
- **Problems:** Previous unit test wont work anymore because of the new structure, so have to test everything personally and add new unit test.

Andre Takhmazyan:

- **Yesterday:** Added new inputs for reminders such as title and being able to repeat reminders and general bug tests.
- **Today:** Make the UI for adding a reminder look better and bug testing the app entirely.
- **Problems:** Bug testing thoroughly to find any bugs.

Kevin Nguyen:

- **Yesterday:** Adding form validation error handling to newly added input fields, namely budget name and remind title. Added null checks to avoid fatal app crash in reminder logic.
- **Today:** Adding error handling for a non unique reminder title and other bug fixes.
- **Problems:** Stumbling on bugs, especially fatal ones, is alarming and requires an attention shift to fix them before continuing with feature implementation.

Sprint Review

Date: 11/20/17

Time: 8:00 pm - 9:15 pm

Location: Discord

Summary:

During our second sprint, we worked on restructuring Sanity's infrastructure to account for multiple budgets, each with multiple categories rather than a single budget and multiple categories like we had before. This was a major change to the application which potentially introduced multiple bugs into our currently working system. However, we knew that we needed to implement this change to satisfy our project requirements. Other substantial changes included implementing our reminder system to set reminders for individual budgets and categories as well as reimagining our app UI/UX with new logo/icon assets as well other minor visual components like links and more validation. Our major focus this sprint was to ensure the app worked the same as before the refactoring. This involved rigorous tests and implementing robust client side validation to prevent an unforeseen crash.

We were able to accomplish our two goals for the Sprint, which were to implement multiple budgets and reminders. We mostly avoided major merge conflicts by working on different parts of the project. Discord continued to work well with

meetings, even though we sometimes had to reschedule. A few times one person needed to wait for another to finish before he could test his work but everyone was able to stay on schedule.