

Sprint 1

CSCI-310 Software Engineering

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Preface

This document outlines the our daily Scrum meetings for the first 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: 11/2/17

Time: 7:30 PM - 8:10 PM

Location: Online conference call (Discord Application)

Tri Nguyen:

- **Yesterday:** Read through code on notifications including Notification and AlarmReceiver class.
- **Today:** Talk with Utsav about Notifications and how to delete pending Notifications when necessary.
- **Problems:** Notifications have a bug where they can't be deleted properly.

Ang Li:

- **Yesterday:** I read documentation on Android Material Design guidelines and CardViews to help with UI ideas.
- **Today:** I will look into how to add a splash screen for when Sanity opens. Right now, there is an obvious activity switching animation to bring up the login screen. I will try to hide that animation.
- **Problems:** The animation may be baked in to Android and I cannot simply disable it.

Utsav Thapa:

- **Yesterday:** Read through the pending intent documentation as well as the alarm manager documentation.

- **Today:** Talk with Tri about Notifications and how to delete pending Notifications when necessary.
- **Problems:** Not sure about how to delete them entirely without affecting other notifications.

Andre Takhmazyan:

- **Yesterday:** Reviewed over Android material design and chose many colors to use for Sanity as well as better looking buttons.
- **Today:** Started experimenting on different color schemes and discussed the overall look with these new colors and icons.
- **Problems:** There is so many options to choose from that it is almost overwhelming on deciding what colors to settle on. Since it all depends on personal opinion it becomes difficult agreeing on a design.

Kevin Nguyen:

- **Yesterday:** I looked over some educational material on UI/UX design for designing clean and user-friendly displays.
- **Today:** Continued looking at UI/UX principles and started thinking about a design scheme for "Sanity".
- **Problems:** Personally, I really dislike front end anything that has to do with UI/UX, but that certainly is not stopping me from making progress.

2. Date: 11/3/17

Time: 6:35 PM - 7:01 PM

Location: Discord

Tri Nguyen:

- **Yesterday:** Talk with Utsav about Notifications and how to delete pending Notifications when necessary. Wrote functions to delete pending Notifications.
- **Today:** Continue working with Utsav to debug Notifications and delete pending Notifications.

- **Problems:** There are a decent amount of bugs that need to be fixed in the Notification class before testing the notification delete function.

Ang Li:

- **Yesterday:** I added a splash screen. I ran into problems recovering the login status and username after minimizing the app. I decided to make a new class to hold global variables for the application. However, I still have trouble loading the categories for a user that already logged in.
- **Today:** I will try to debug the problem with categories not loading. I think it has to do with the the BudgetManager class not retrieving the database information.
- **Problems:** Maybe my bug is related to a class besides BudgetManager and I am unable to locate the source.

Utsav Thapa:

- **Yesterday:** I changed the notification id to a randomly generated one that is stored at database. This will allow us in the future to delete alarms based on their ids.
- **Today:** I will connect the delete with the update and make sure it will fully delete the alarms, and we will be able to update it.
- **Problems:** Finding a way to test notification automatically as the way we do it right now is not efficient as we have to change time within the app a lot.

Andre Takhmazyan:

- **Yesterday:** I experimented with different combinations of colors and icons on the android app and been discussing them with teammates.
- **Today:** I am going to group all the color values, textsize values, and margin values into one xml file for easy editing and changing.
- **Problems:** There are so many different sections in the app to recolor that it is hard to keep track of where everything is.

Kevin Nguyen:

- **Yesterday:** Continued looking at UI/UX principles and started thinking about a design scheme for “Sanity”.
- **Today:** Looking into and starting on login screen(s) design.
- **Problems:** Hard to delegate UI tasks amongst team because we want one overarching design.

3. Date: 11/4/17

Time: 3:00 PM - 3:20 PM

Location: Discord

Tri Nguyen:

- **Yesterday:** Wrote extra functions to create and delete pending intents.
- **Today:** Test delete function of Notifications to see if it can delete PendingIntents properly
- **Problems:** Notification class still has some bugs that may get in the way of testing.

Ang Li:

- **Yesterday:** I fixed the bug with the budgets not showing up. I had forgot to pass an intent from the splash screen to the main menu. I also removed the “Sanity” action bar from the Login, Reset, and Sign Up screens. Finally, I fixed a bug in the reset screen where if the user left both passwords blank, the app would crash.
- **Today:** I will look into how to detect the user swiping a budget category. Swiping should bring up additional options such as adding transactions and deleting categories. This could reduce the number of buttons on the main menu.
- **Problems:** The current logic with pop-ups may not work if there is no longer a distinct button for every action. I may need to pass the category to the button handler.

Utsav Thapa:

- **Yesterday:** Streamlined the notification class, and added a few more bug fixes.
- **Today:** Will retest functionalities, and make sure there is no bugs before moving forward to completing delete.
- **Problems:** Making sure that everything works as intended before fully implementing the delete functionality.

Andre Takhmazyan:

- **Yesterday:** Grouped all the color values, textsize values, and margin values into one xml file for easy editing and changing.
- **Today:** Looking through more color combinations and material design and settle on a theme for the app.
- **Problems:** Difficulties finding all the android layouts that need editing and adding of margin values.

Kevin Nguyen:

- **Yesterday:** Refactored and redesigned the XML layout of the login, sign up, and change password screens.
- **Today:** Continuing to add authentication UI features (validation etc.) to the auth screens and playing with the color scheme of the screens.
- **Problems:** Keeping the design consistent is something important to always remember.

4. Date: 11/5/17

Time: 6:00 PM - 6:30 PM

Location:

Tri Nguyen:

- **Yesterday:** Added delete notification functionality into notification updates, this should delete pending notifications and replace them with new notifications when settings are changed
- **Today:** Testing the functionality added yesterday to see if it works

- **Problems:** Testing notification functionality is difficult since changing dates can cause glitches in Android emulators.

Ang Li:

- **Yesterday:** I looked into how to swipe listview items. After conferring with my teammates, I learned that swiping left is not a common input as it is on IOS. I think it will be better to use a long click to implement additional functionality in the main menu as it is more common in Android.
- **Today:** I will look at the long click implementation in Android and try to use it to delete budget categories.
- **Problems:** We may have disagreements on UI functionality and appearance.

Utsav Thapa:

- **Yesterday:** Reviewed the notification code, and updated database and added few changes to it. Discussed the delete notification functionality with tri.
- **Today:** Test the delete functionality to make sure they work perfectly.
- **Problems:** Changing date in emulator brings few glitches which are a bit difficult to go through.

Andre Takhmazyan:

- **Yesterday:** Looked through more colors and material design and settled on a color theme for the app, a dark color theme.
- **Today:** Create a splash screen graphic in photoshop and implemented it as an app theme with a reasonable delay.
- **Problems:** Thinking of what to put on the splash screen and what colors to use was a difficult challenge because the possibilities are limitless, but I eventually settled on something.

Kevin Nguyen:

- **Yesterday:** Continuing to add authentication UI features (validation etc.) to the auth screens and playing with the color scheme of the screens.
- **Today:** Continuing to add auth features and tidying up the design of the application. Changing several UI components.
- **Problems:** Settling on a design is tough in terms of font family, font weight, font color, button vs link, etc.

5. Date: 11/6/17

Time: 11:25 AM - 11:45 AM

Location:

Tri Nguyen:

- **Yesterday:** Tested functionality of deleting pending notifications, it cancels the notification but does not create a new one
- **Today:** Fix the notification update functionality and make minor graphical changes to the analytics
- **Problems:** Notifications and changing the time on the android emulator are both buggy.

Ang Li:

- **Yesterday:** I implemented long click to delete categories. I also changed the main menu UI to remove the delete category button.
- **Today:** I will find a way to delete multiple categories at once. I want to have checkboxes appear next to the categories when the user longclicks and a delete button to appear at the top. By default, the category that was longclicked from will be selected.
- **Problems:** I am not sure how I would change the xml layout dynamically to add the checkboxes. I need to decide if I want to use fragments and put the main menu in one.

Utsav Thapa:

- **Yesterday:** Discussed the code with Tri, and did some database testing for the notification codes.
- **Today:** Test the notifications to make sure that everything works as intended.
- **Problems:** We don't know of a way to unit test the notification to make sure that it works as intended.

Andre Takhmazyan:

- **Yesterday:** Created a splash screen graphic in photoshop and implemented it as an app theme with a reasonable delay.
- **Today:** Change colors of the app even more and changed all the font colors to match the color theme.
- **Problems:** Some Android elements are difficult to change the font color of such as Spinner and DatePicker.

Kevin Nguyen:

- **Yesterday:** Continuing to add auth features and tidying up the design of the application. Changing several UI components.
- **Today:** Finishing up login and form validation by adding persistent error messages below each editText field.
- **Problems:** Figuring out how to display the relevant error messages at what time requires planning.

6. Date: 11/7/17

Time: 7:30 PM - 8:00 PM

Location: Discord

Tri Nguyen:

- **Yesterday:** Fixed notification deleting and updating, the notifications should update properly now.

- **Today:** Add text to notifications for extra details, including time remaining and exact amount spent
- **Problems:** Testing notifications by changing time is buggy

Ang Li:

- **Yesterday:** I implemented the multiple category deletion. The user can select and de-select budgets by long clicking. The analysis button changes to a delete button. I also changed login activity so that the user can return to the login screen from the sign up and reset screens.
- **Today:** I will change the logout button so that it cancels and unselects all categories.
- **Problems:** Later when we implement multiple budgets, we won't have a logout button so I have nowhere to hide the cancel delete button.

Utsav Thapa:

- **Yesterday:** Tested some notification functionalities to make sure everything worked.
- **Today:** Do more testing to make sure it works.
- **Problems:** Finding a way to more easily test notification.

Andre Takhmazyan:

- **Yesterday:** Changed colors of the app even more and changed all the font colors to match the color theme.
- **Today:** Changing the input for all monetary values to limit to 2 decimal places and make sure all UI looks correct.
- **Problems:** Finding a proper way to do monetary input was difficult to figure out.

Kevin Nguyen:

- **Yesterday:** Finishing up login and form validation by adding persistent error messages below each editText field.

- **Today:** Form validation on the main menu screen pop-ups. Adding limits to field inputs of 30 characters save for the memo which will have a limit of 200 characters.
- **Problems:** Copy and paste of boilerplate code from input field to input field makes the process tedious and potentially bug prone.

Sprint Review

Date: 11/8/17

Time: 4:30 PM - 5:20 PM

Location: Discord (Remote)

Summary:

During our first sprint, we worked on fixing our notification system for notifying the user when certain budget conditions are met (e.g. budget over limit, budget period over, etc.). The user is now able to customize these conditions by changing the budget period and notification threshold and receive notifications according to their specifications as well. We also worked on UI/UX for the app, specifically making the app conform to a color/style theme. We also made UI/UX changes to make each menu element fit better on the screen. Furthermore, we implemented client validation of input fields so that they show error messages if certain input conditions aren't met (e.g. empty fields, malformed inputs, invalid inputs, etc). There were no tasks that we planned that we couldn't implement during our first sprint.

Using Discord helped us meet at flexible hours. We were able to keep each other updated and help each other figure out problems. We also resolved disagreements about UI elements in a positive and constructive manner. We kept the goals fairly open ended. We were all very motivated to improve our app. For the next Sprint, we may pick more specific goals if we start to go off schedule. Sometimes, it

was difficult to coordinate workflow to avoid merge conflicts. For Sprint 2, we will meet to code together to help with conflicts.