# 1. Team 13 Bi-Weekly Report 3
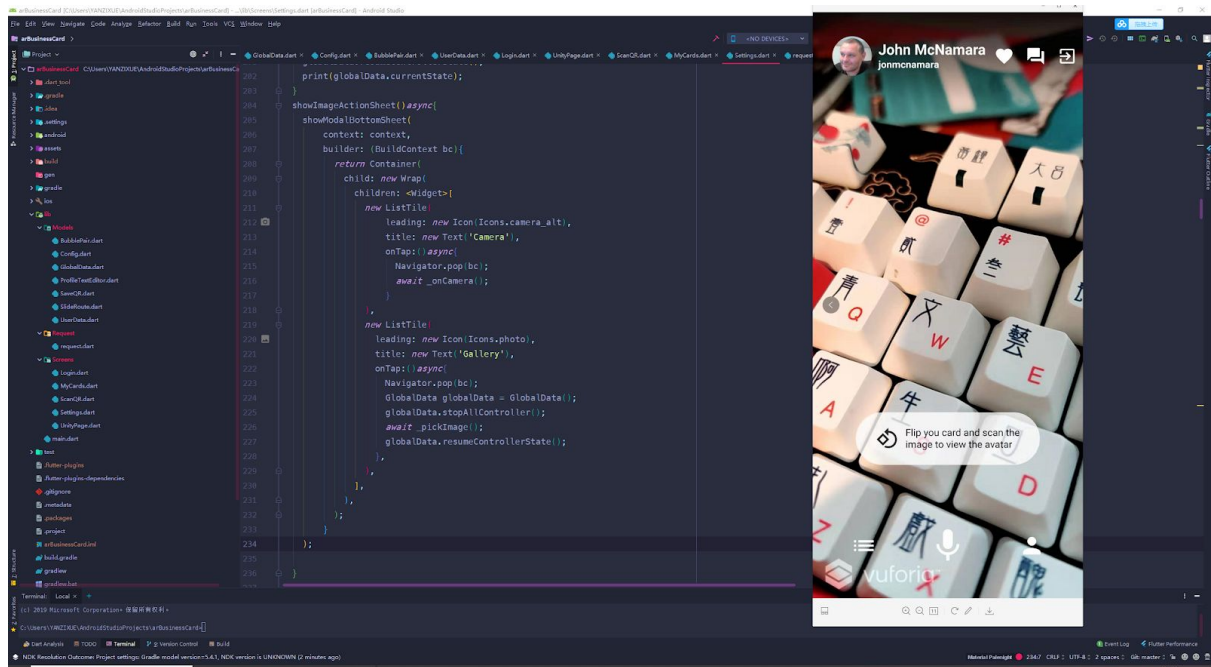
IBM AR Business Card
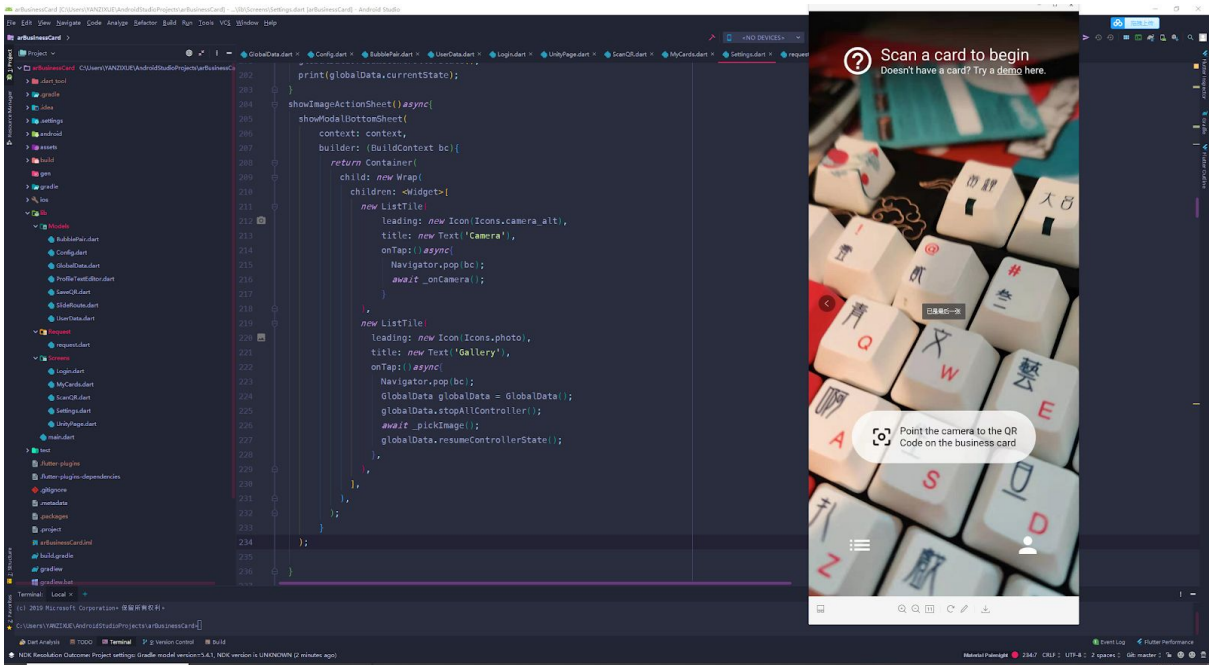
8 December 2019 - 24 January 2020

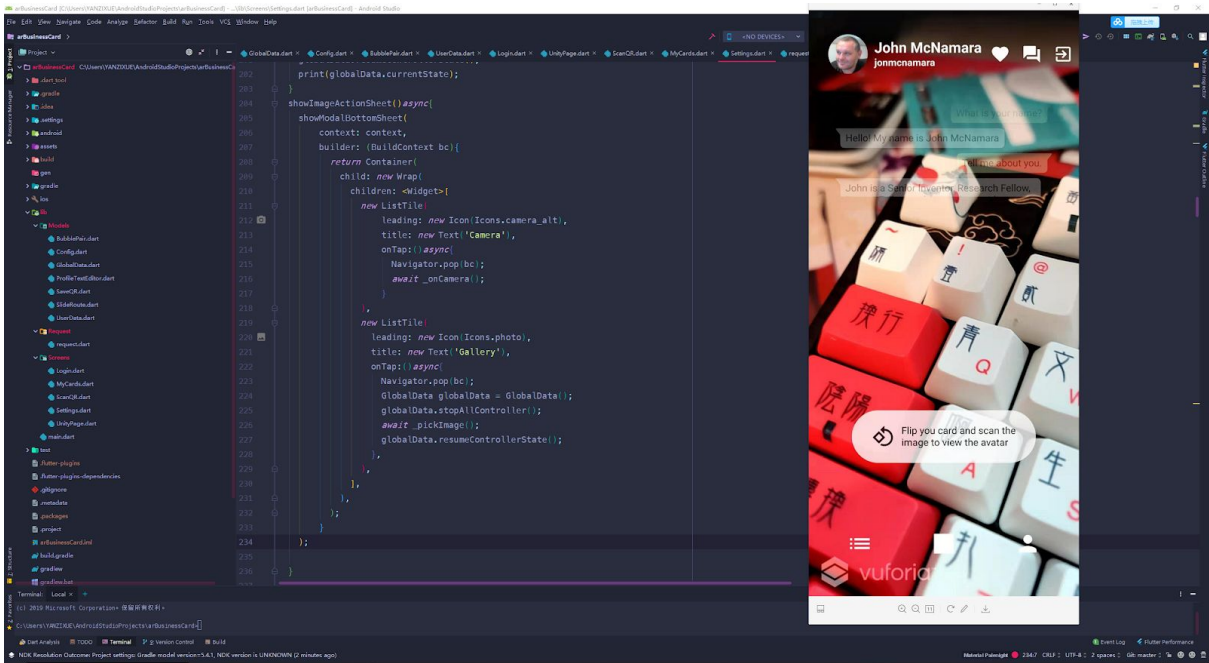## What we have done during the holiday and the last two weeks

We have hugely improved our UI design of the main unity page, and improved the QR code scanning logic. We have combined QR code scanning function and the integrated unity app on the same page. We can now successfully scan QR code from our business card and retrieves data from the backend, and pass the user profile to unity.
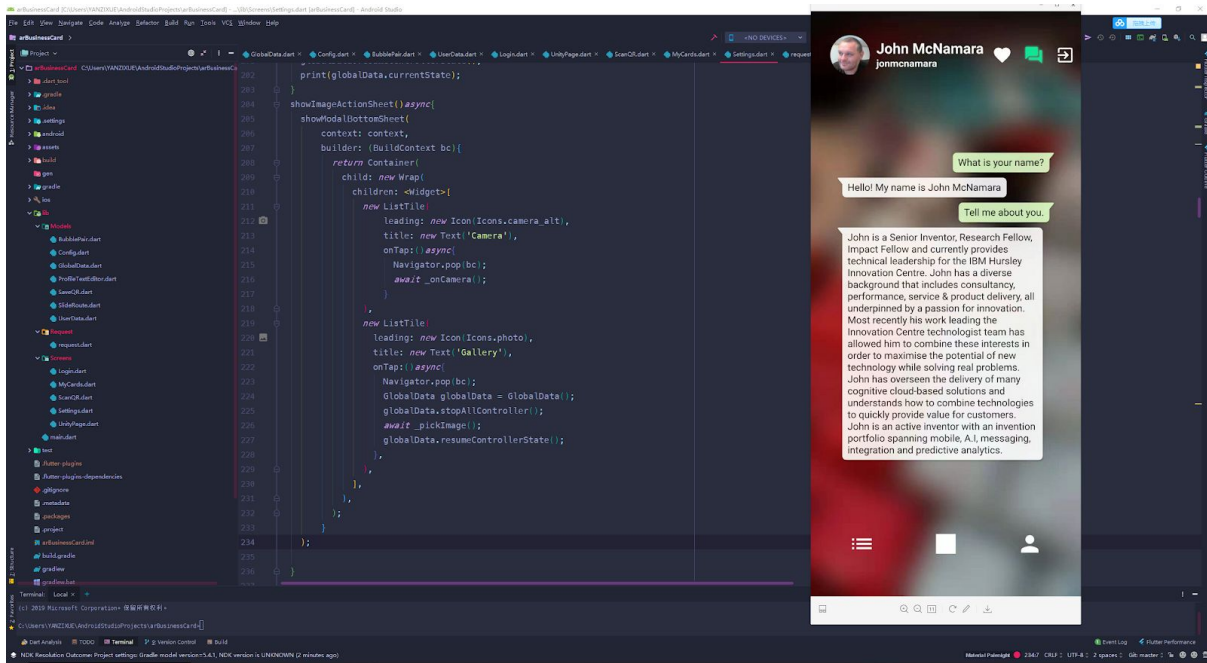
We have improved speech to text function that wouldn't crash as regularly as before. We decided to remove the settings pages and replace it with a newly designed user profile page instead. We have now finished the user profile page that allows user to modify their details such as education, gender, description and work experience. Any changes made in the setting page will be synced and stored in the cloud.

A text to speech function is used in the unity page that can reply to the question by the speaker. A chat bubble will display the content spoken by the user and the reply from the app, just like any instant messaging software. The user can even double-tap or tap the chat icon to view full details.

We also set up our backend using Node.js with express, that supports the profile sync, history and favourite dummy data, and MongoDB that stores user data and provide API.

## Estimation of whether the project is running on time

We have a clear plan for the upcoming months. Furthermore, we update the tasks situation on the Trello board frequently. Now, the project progress is on the right track and beyond. We have finished around 60% key functionality and 50% optional functionality so far.

We have now partially finished the mobile application, the back-end server and the database. Hence we think we can complete the development of the fundamental functionalities which have already been mentioned in the MoSCoW requirement list on time.

## Problems that need to be resolved before the next report

There are several known bugs we need to fix. Most of them appear in the mobile application. Firstly, the screen will suddenly flash when unity status is changed. It affects the user experience negatively. Secondly, the timeout function does not work as expected. It causes internet request loading forever. Last but not least, speech recognizer crashes for no reason, which is the highest priority bug we should fix.

## Plans for the next two weeks

For the whole project, we will be working on the development of web dashboard and user authentication (set up OAuth API or use username and password).

For the functionality of the mobile application, we will be adding a feature that user can download their unique QR code. User can print this QR code on their business card directly for sharing. Also, we want to add a blur filter for unity when the chat bubble history is extended. It would make the messages clearer and easier to read.

# Report Summary

## What we have done during the two weeks

- Integrate unity app and scanning QR code function
- Improve Watson's text to speech function
- Finish to set up the setting page of mobile application
- Improve user experience by adding a bubble displayed the context AR avatar reply to the user
- Setup backend server using express(node.js web application framework)
- Setup MongoDB database

## Problems that need to be resolved before the next report

- The screen will blink when changing unity status
- Fix the error about Timeout function

## Plans for the next two weeks

- Set up web dashboard
- Start to set up OAuth API and other relative to user authentication
- Add blur filter for unity when viewing the chat bubble
- Allow user to download their unique QR code image.