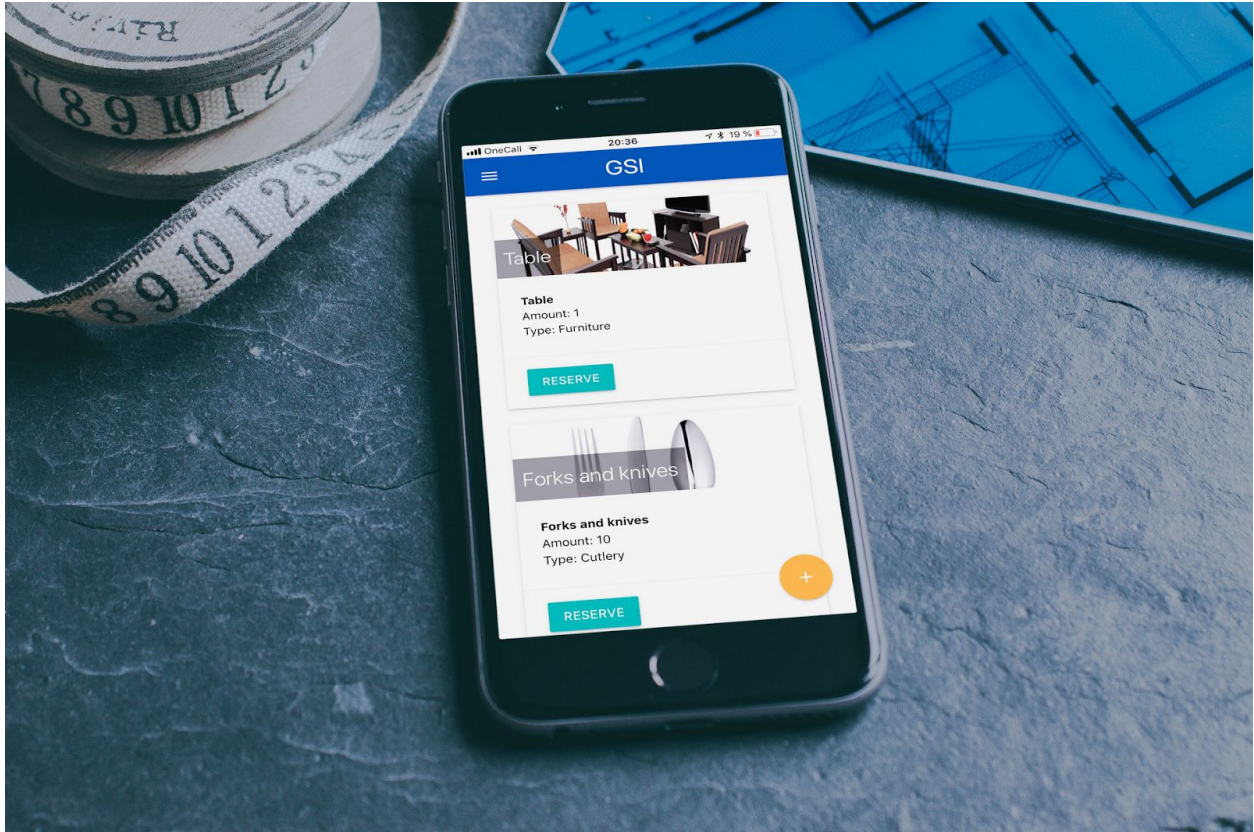IMT3673 – Mobile/Wearable Programming

Get started internationals

Group 22:

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Web app: https://getstartedinternationals-1467c.firebaseapp.com/index.html

Github repository: https://github.com/freddypauls/GetStartedInternationals

"NTNU-Gjøvik receives around 100 internationals students during the autumn semester, and around 50 students during the spring semester. These numbers are actually increasing since HiG joined NTNU. Most of those students are having accommodations in SIT's apartment where they don't have any equipments for their rooms (apartments) and kitchens. That has forced the students to buy all needed equipment when they arrive to Norway and throw/give it away when they leave."(Gitlab, 2018)

The project was about "creating a mobile application that helps collecting the equipments from students before leaving Norway and give it to the new students when they arrive. This will be done by having a database that allow users to register the items they have before leaving. Also new students will use the application to browse for registered equipments and reserve it if they wanted it. The application will contains three types of users:

- Arrival student: Student who is coming and want to check out if there is any available equipment that he/she may need.
- Leaving student: Student who is leaving at want to register his/her equipments into the database.
- Admin: An admin that makes sure that register users (Arrival & Leaving students) and hold status of the database to make sure that all registered data are right."

Before the group started developing we met with the supervisor and got a briefing about our task. The requirements was discussed and also different development approaches such as witch technologies to implement. We agreed that Firebase and Javascript was a good option and was preferred for further use buy our supervisor.

After the meeting we did some sketches and wireframes on paper and started on the design. The design of the application we decided on quickly. Material Design is a known design to most people as they have seen and used a lot of Google's products. Using a design people are familiar with reduces confusion and improves usability and

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efficiency. As well as Material Design is very minimalistic so it reduces clutter and provides a clean and professional look. To achieve the design we utilized MaterializeCSS which is a modern responsive front-end framework based on Material Design. We also chose to use the blue color of NTNU as the header to tie in that its a NTNU application. For the logo we also used the NTNU logo and added GSI (Get Started Internationals) over it to make it recognizable. The design of the whole page is also responsive so it works on both mobile devices and desktops. Sort of a requirement when making a webapp.

The development process was fast, we utilized some code that we used in Lab4 to quickly get started and we also used MaterializeCSS for design elements. From there we fixed the bugs with the old code, and started development on the required functionalities of the webpage. We also created a new email to use with firebase so that everyone could use that mail, and so that someone else could take over the project at a later date and keep using that email. That email was also used for the admin account on the application/website. Next function created was the registering of items functions, which allowed us to move on to displaying the items. After this was done the admin management part of the application was left. This went pretty smooth.

The features included:

- Login
- Registration
- Browse items
- Register item
- Reserve item
- See "my reservations"
- Admin view for browsing and deleting items
- Admin manage users (change type and delete)

- Admin manage item status (update status/ hold items to make sure everything is correct/delete)

To do list (future stuff, not included in the project description/requirements):

- Sorting of tables
- Filtering of browsing items and tables
- Upload picture of item, and use that image for the item

In this project we learnt how to set up a web app using google's manifest.json format and iOS's meta tags. We also learnt more about how to use Firebase and functions around that. Also learnt more about JavaScript in general.

References

GitLab. (2018). *Get Started Internationals*. [online] Available at:
http://prod3.imt.hig.no/teaching/imt3673/wikis/Getstarted-internationals [Accessed 2
May 2018].