University of Reading

Department of Computer Science
Final Year Project Logbook
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Tutor – Xia Hong

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Autumn Term

Week 1 - 21st September 2020

Tasks done

- Set up git repositories on both git hub and lab
- Set up local environments for development

To do list

- Start filling in PID
- Prepare for tutor meeting
- Begin research into recommender systems

Week 2 - 28th September

Tasks done

- Conducted research into feature which could be added to the app
- Deciding on what platform to use
- Attended Tutor meeting
- Created timeline for work in PID

To do list

- Look into any legal social or legal issues for the PID
- Get the Tutor to look over the PID before submission
- Look into Weather API services

Week 3 - 5th October 2020

Tasks done

- Completed and filled in the PID form
- Submitted the PID
- Started writing Research notes.

- Go into greater depth about recommender systems.
- Experiment with planning neural network structures

Week 4 – 12th October 2020

Tasks done

• Found and recorded multiple API services and prices.

To do list

- Start looking into Neural networks.
- Revise some java .
- Look into Kotlin.

Week 5 – 19th October 2020

Tasks done

- Wrote some of the finding about Recommender system from info learned from Ricci.
- Decided to use java for the application.

To do list

• Continue research into the relevant areas for feature(Recommender Systems, Neural nets, Android, API)

Week 6 -26th October 2020

Tasks done

• Looked into the API's which I could use a decided that this would be more of an aspirational feature which I might add if I have enough time to implement.

To do list

- Try multiple method of using the IDE by either emulating a phone or by connecting my phone.
- Create a presentation to show during the tutor meeting.

Week $7 - 2^{nd}$ November 2020

Tasks done

- Completed initial phase of research for the project covering Recommenders and other features to include.
- Created the slide for the tutor meeting an presented it.

To do list

• Get Eclipse fully work for my home setup.

Week 8 – 9th November 2020

Tasks done

• Got eclipse working and start a test file to experiment with ideas.

To do list

• Test the IDE to ensure it's all set up with my working at home setup.

Week 9 – 16th November

Tasks done

• IDE is up and running at home

To do list

- Taking a break from development to focus on coursework.
- Pick back up where I left off once course work has been completed.

Week 12 – 7th December

Tasks done

• Got the test application running and properly emulating onto my smart device

- Take the Christmas break off.
- Set myself up for continuing work after the Christmas break.

Winter Term

Week 1 - 11th January 2021

Tasks done

- Transferred to use mostly Git Hub.
- Started coding a basic neural net.
- Testing how to code outfit and clothes classification

To do list

- Fill in the feedback form and submit it.
- Continue to build the prototype network.
- Test the network when the network is completed.
- Figure out a way to test the network.

Week 2 – 18th January 2021

Tasks done

- Completed and sent in the feedback from.
- Created testing criteria being the personal profile system.
- Got the first prototype up and running.

To do list

- Fill in the feedback form and submit it.
- Implement the test idea.
- Record and display the result.

Week 3 – 25th January 2021

Tasks done

- Tested the algorithm.
- Recorded the results and produced tables and graphs form the results.
- Tested the algorithm with a myriad of settings.
- Got prototype for taking pictures working in android studio.

- Expand the network to become more complicated than a linear network.
- Plan how to make the project poster.
- Start creating the prototype for the UI of the Application.

Week $4 - 1^{st}$ February 2021

Tasks done

- Added extra nodes to the Neural network.
- Started some work on the project poster.

To do list

- Continue working on the project poster.
- Work more on the UI of the application.
- Start implementing the Neural network into the application.

Week 5 – 8th February 2021

Tasks done

• Added Neural network into the application.

To do list

- Adapt the neural network so it runs better for the application.
- Finish the project poser and organise a time to demo to my tutor.

Week 6 - 15 February 2021

Tasks done

• Presented the project poster.

To do list

- Fix some of the implementation of neural net.
- Record and submit the poster video submission.

Week 7 - 22th February 2021

Tasks done

- Recorded and finish the poster video.
- Fixed some the issues with the neural network.

Cleaned up a lot of the code making it more readable.

To do list

- Implement the other activities.
- Find ways to send information between screens.
- Expand the network within the app.

Week 8 – 1st March 2021

Tasks done

- Created item adding screen.
- Defined the clothes object within the application.

To do list

- Complete the edit activity.
- Expand the definition of the clothes objects.
- Take a break from development to focus on coursework.

Week 13 – 5th April

Tasks done

- Finished the edit screen.
- Added picture to the clothes objects.

To do list

- Test the functionality of the edit screen.
- Implement the profile testing for the application.

Week 14 – 12th April

Tasks done

- Got the core system of the application functional.
- Expanded the network to include hidden layers
- Streamlined the network and encapsulated it to improve readability.

- Thoroughly test the network.
- Create the presentation slides.
- Create a demonstration of the application.
- Continue working on the report.

• Recorded the presentation.

Week 15 – 19th April

Tasks done

- Submitted the presentation and demonstration.
- Progressed significantly in the report.
- Finished the last entry into the logbook.
- Tested the network and obtain the relevant results to present.

To do list

• Finalize the report for submission.

Autumn Gant

| | Week1 | Week2 | Week3 | Week4 | Week5 | Week6 | Week7 | Week8 | Week9 | Week10 | Week11 | Week12 |
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| Research Writing | | | | | | | | | | | | |
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| Program setup | | | | | | | | | | | | |
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| Coursework | | | | | | | | | | | | |
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Winter Gant

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week1 0 | Week1 1 | Week1 2 | Week1 3 | Week1 4 | Week 15 |
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| Development | | | | | | | | | | | | | | | |
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| Feedback | | | | | | | | | | | | | | | |
| Form | | | | | | | | | | | | | | | |
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| Project | | | | | | | | | | | | | | | |
| poster | | | | | | | | | | | | | | | |
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| Presentation | | | | | | | | | | | | | | | |
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| Testing | | | | | | | | | | | | | | | |
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| Report | | | | | | | | | | | | | | | |
| writing | | | | | | | | | | | | | | | |
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| Coursework | | | | | | | | | | | | | | | |
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