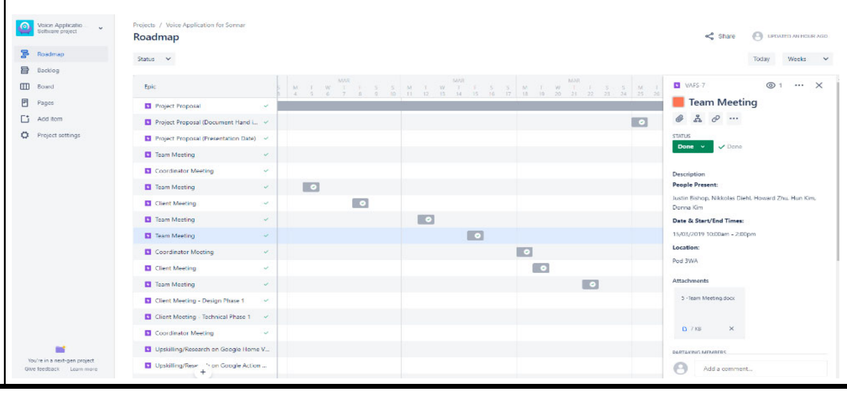
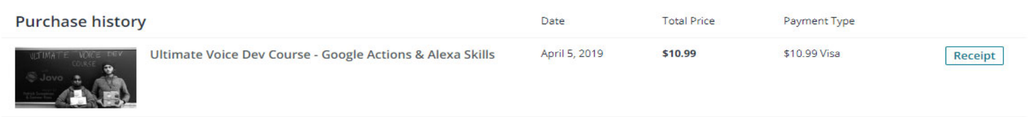
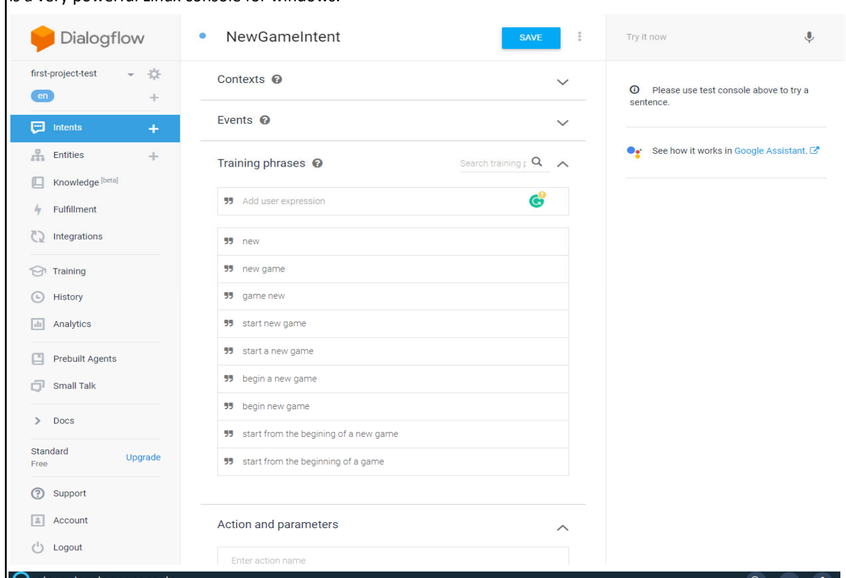
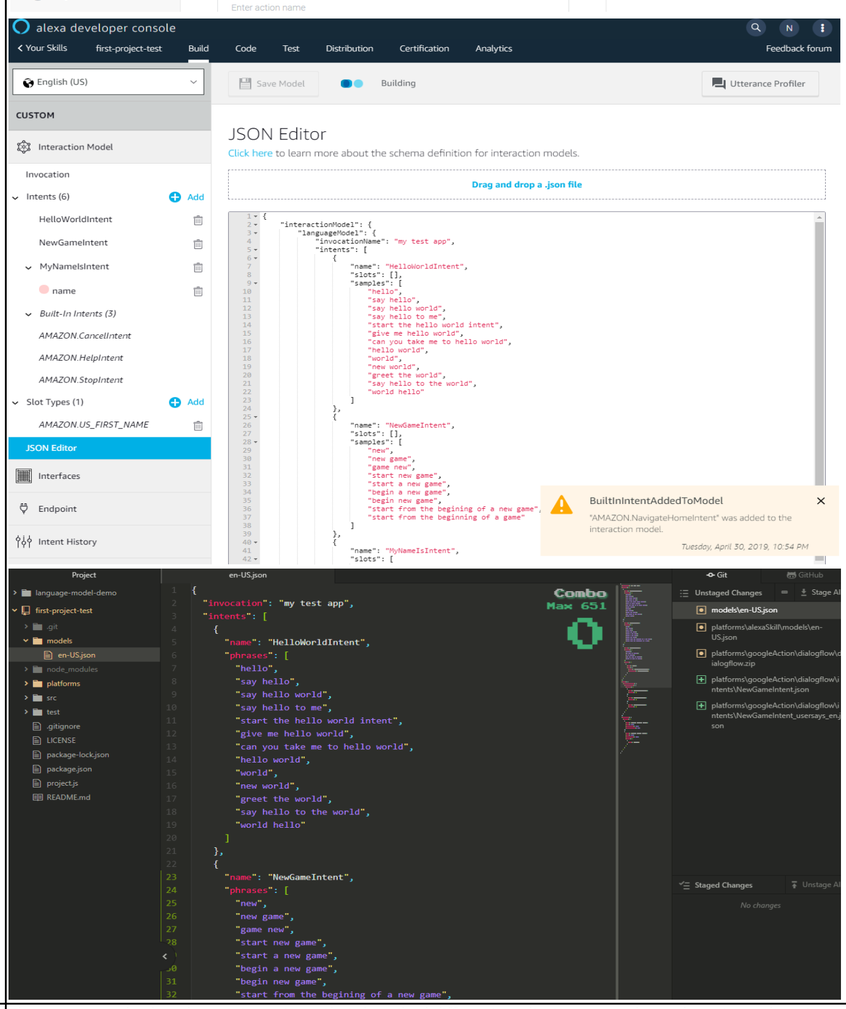
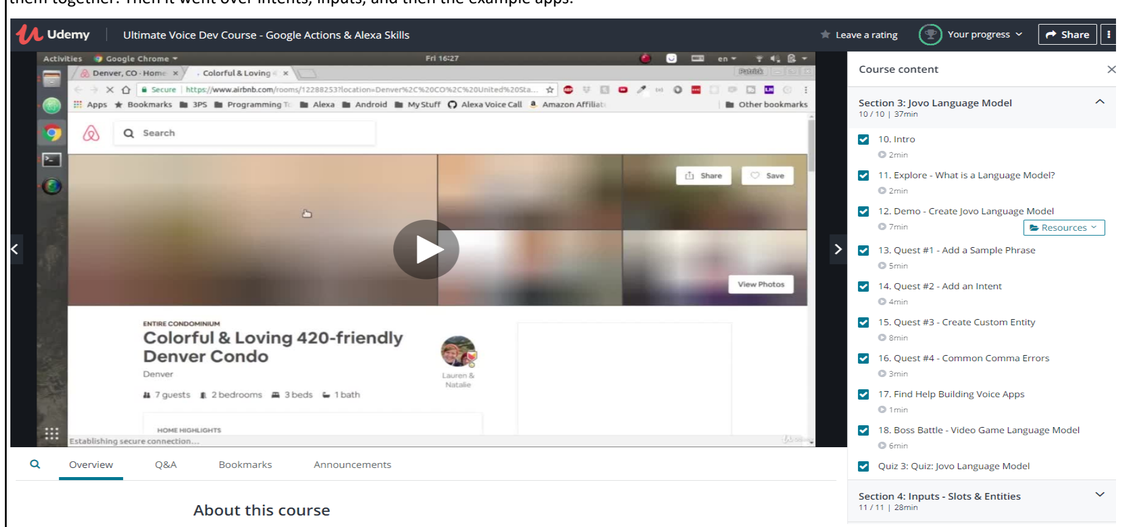
Personal Work Log

Nikkolas Diehl - 16945724	Hours spent semester 1: 178.2	Hours spent semester 2: 155.5	Total Hours Spent on the R&D Project: 333.7	
Total days since Project Start: 246	Assume 4 hours of work each day: 984 probable working hours since project start		Work Percentage: 33.913%	Number of Logs: 79

Date	Hours	Difficulty with task (Easy / Moderate / Hard)	What did I learn	Personal Reflection Of Events During This Time
WEEK 1 - Hours: 8				
26/02/2019	2	Easy	My team and I met for the first time so I gained some basic info about my team mates	My team and I created our first time schedule which we promptly sent our coordinator, asking for a time of meeting
28/02/2019	2	Easy	Our coordinator and us went over the rules and regulations of the project	I was and am still quite overwhelemed by how much information and things and people we have to meet, do and learn. The meeting with our coordinator gave me some perspective on the work load we will be given. We also found out that we have to take minutes for every single meeting which I did not release previously.
28/02/2019	2	Easy	—	I worked for two hours getting the team set up with different files and systems we would use. I researched some project management systems to try find one that would fit our requirments and found anasa would work. We held off temporarly from purchasing the PMS as to wait for the meeting with our sponsor company
26/02/2019	2	Easy	I learnt the basics and formularised myself with the project. This was my first lecture for a really big project	The first lecture was a bit worrying because of how big and complex the project could be and my team and I where quite worried about how it would all work out but pushed anyways. Our Advisor is Karen Phipps, our Moderator is Akbar and our client is Jarek Beksa. We found out our project presentation/project proposal is due in week 5 which we wanted to get started asap.
WEEK 2 - Hours: 6.6				
5/03/2019	2	Easy	—	My team and I started working on the project proposal and getting our details and work structure together. We had only just met each other and our coordinator so didn't know much. I personally emailed our coodinator to organise the date at which we would meet our client which ended up being the Friday of this week
5/03/2019	2	Easy	Lecture 2 went over a lot of how a project starts and how the project proposal is the first step to that.	By this point my team and I where actually quite happy since we had worked for a while on starting up the beginings of our project proposal and where excited to meet with our client later this week. We where already a step ahead when it comes to the project proposal. A project proposal is all about gathering the nessesary information about the project. Is it fesable, is it necessary, why do we need it, is it manageable and so on. We also needed direct requirements such as functional and non-functional from our client which we hoped to get ASAP. We had agreed earlier that our team should try and meet; if it is required, every Tuesday and Friday. Some weeks though we thought there might be no need, and in that case, we need to keep eachother up to date with online contact. We had also earlier created a meeting minutes template that we would use for all future meetings and discussions
8/03/2019	2.6	Moderate	We learnt a huge amount about our project and what we would be doing but not so many actual software specific details which where planned for later	We met with our client for the first time (Jarek Beksa). He was a very nice guy and seemed genuinely interested and excited for the future of voice applications. We got a brief introduction to the Sonnar company which are working to be some of the worlds first cooperative voice application companies working on making helpful and useful applications. In our case it is a voice application for the deaf. The goal of our specific project was to create a google home version of their own application which was already available on alexa devices. Our client wanted us to only take 2 to 3 months and we where alittle worried about this time scheduling but noted it anyways.
WEEK 3 - Hours: 8.1				
12/03/2019	2.1	Moderate	—	Today we worked on the beginnings of our project proposal. We didn't know that much or enough about our project to build the entire thing but we made a decent start. We did the cover page, terms of reference, agreement form which we signed and created a rational document for the project proposal which can be found here: https://tinyurl.com/ProjectProposal-Rational I also sent our client some very specific questions about the functionality and scheduling of the project so that we would write out the finished project proposal
12/03/2019	2	Easy	We went over and learnt mostly stuff about management of our team and project	Our third lecture so far. I didn't attend but read over the lecture notes later. Mostly because I was working hard on some other projects. The lecture discusses stuff like logbooks and how to keep up to date, expectation management (which I was massively worried over since our project at it's core, sounded quite small), requirement gathering (which we had done a bit of with our client but wanted more functional requirements) and some other things. Around this time we where heavily discussing what we wanted as a team for our methodology. We first decided it would be easiest to run with Agile Scrum since we already had lots of experience in it.
15/03/2019	4	Moderate	—	Today we had a team meeting from 10am-2pm to work more on the project proposal which was due in a weeks' time. We wanted to use as much time and information we had gathered to write as much as possible. We first wrote out templates for all the documents we would need. Then we reviewed the client email for the specific project details and created a document control file, scope and objective segment, project method/approach segment, project plan segment and did an overview of our work. We also discussed our methodology and decided that for our project, Agile Scrum would not work as well. Instead we decided to work with Kanban which was researched and developed by Toyota. It uses a to-do list style and suited our project a lot more since we understood all the requirements and thus fit Kanban a lot more. For Kanban we found that the same company that builds trello (anasa) also builds another software called Jira which was Kanban based with some aspects of scrum built in which perfectly fit our project. We then allocated work out to each of us to finish off the project proposal over the weekend. 
WEEK 4 - Hours: 11				
18/03/2019	2	Easy	—	On Monday we met with our coordinator to discuss and get some more information on what is needed for the project proposal. We also wanted to show Akbar some of our work that we had already done for the project proposal. We discussed what is needed specifically from our client and concluded that we would need to meet with our client again to discuss functionality. We discussed some specifics about the communication management plan which we wanted some insight on. We also had a chat between the difference with our project proposal and what it would be like to write one in a real-world situation which made me a little worried about the future. We also went over some basic marking schedules for the project proposal to help us prepare and went over our budget document and other small presentation details. After the meeting concluded I quickly emailed our client and asked if we could meet immediately to discuss proper functionality requirements for our project proposal which was due in a week. Luckily, he was able to meet the next day.
19/03/2019	3	Moderate	Functionality requirments for our project	Today we met with our client to discuss our functionality requirements for the project since we needed to know the exact way, we were asked to build our project. • We discussed opportunities for after the project and what we could also do. Most of this included extra functionality for the main project. • Our client gave us a little demonstration of the currently working Alexa application and an explanation of the functionality as well as a flow graph for the UX. • We discussed what methodology we where using and how it would affect our client. • We discussed some extra functionality for the voice application that could be possibly implemented. • We took a look at Librivox's data storage model • And we talked about how to use both Libirivox and archive to achieve better search functionality. • Our client also gave us a little bit of help with what might be needed in the presentation since he had marked them before.
19/03/2019	2	Easy	The fourth lecture went over methodologies more and discusses the uses of them	I did not attend this lecture either due to our meeting with our client and being extremely busy with other projects. I later spent about 1 hour looking over the lecture notes. The lectures notes discused a lot of the method choices we could choose or use which again, we where starting to get worried about because we still didn't know much about our project besides simple requirements. Alghough we started to look for some good tutorials for upskilling with. The issue register was actually a really interesting bit because the way it was laid out reminded heavily of how Kanban works and why we chose it. The idea of having a daily todo list when we start developing is a very nice idea so I am glad we stuck with kanban
22/03/2019	4	Moderate	—	We spent about 4 hours finishing off, combining and concluding our project presentation practice and project proposal documents. • We reviewed our current proposal documents and changed some information to better fit what we had learned from our client and coordinator. • We combined all the individual documents into one big proposal document. • We started work on the proposal presentation slides. • We built up an introduction slide to be read by me, a scope and objective slide to be read by Justin, a methodology slide to be read by Donna, a development slide to be read by Hun, and a cost estimation slide to be read by Howard
WEEK 5 - Hours: 6				
22/03/2019 - 25/03/2018	2		—	I was emailing and talking to our project coordinator and moderator for the date at which we would do the project presentation. We planned for Wednesday the 27th
26/03/2019	2	Moderate	—	We did a quick team meeting just to print out all the project proposal documents and get them read for our presentation tomorrow. We also did a little practice of our project presentation
27/03/2019	2	Hard	—	We did our project presentation this day and I found myself quite nervous. We originally planned for 9am but for some reason our moderator did not get our colander invitation link so the presentation date was pushed back to 2pm the same day luckily without much hassle. I personally think we did really well during the presentation and didn't struggle too much. The presentation went almost exactly as planned and we had very little hiccups. The moderator then did his questioning and on one question about our time scheduling and cost management we didn't fully know how to answer. The moderator had asked about how we expect to finish the project in so little time but because the client had wanted us to finish earlier, we weren't sure how to answer. Our project proposal apparently looked very good to them and they were happy with our progress and work so far. Our project proposal can be found here: https://tinyurl.com/ProjectProposal-COMPILED
WEEK 6 - Hours: 8				
1/04/2019	2	Easy	I spent about an hour on Monday going over the previous weeks lecture	Week 5's lecture covered: Adressing conflict. Our team had 0 contact thus far and we hoped and planned not to have any more. The lecture goes over good ways to compartmentalise problems and issues. If our team has issues with a general task, then we will work to break it down into manageable chunks to deal with individually. Communication problems, limited reousrces, task interdependence and so on. Personally I strive to completely avoid contact if at all possible.
2/04/2019	2	Easy	Week 6 lecture was going over the mid-project review and time management.	This lecture started to get me a bit worried as there was a status repoty and a portfolio of evidence due in week 11 but it should be alright. The status report should contain a brief project description and how up to date it is, scope, apporach, major milestones and so on. It should also contain deviations and variations off of the original plan. It should then have a current project status for the 1st half of the R&D project. This contains work completed and work not done. QA work, milestones, scheduling and so on. Personally I don't think all this will be too hard but I am worried we will be behind schedule. However, technically this is ok since the point isn't so much as to finish, but rather the journey and how you learnt and how you operated in a real world scenario so even if we struggle behind schedule, it's still part of the learning curve which makes it easier to think about. In week 12, we also have an interview review. Although I'm not too sure about this and a bit worried but effecitvely 'The' interview team will use criteria by which your final portfolio will be marked. They look for evidence of project planning and control, team work and communication, relationship with our client and coordinator, developement activities and outputs and quality assurance activities. Although we don't have any quality assurance within the company so everything is usally run by Jarek himself
4/04/2019	2	Easy	—	We originally planned to meet with Jarek and his two lead developers but they; in the end didn't show up. Instead we went over some basic questions we had for the project and planned out another meeting the week after to meet with the two lead developers. We where also given a basic flow graph of the UX design but where told it was slightly outdated. We were also given an NDA that we had to sign in order to work with Sonnar Interactive.

5/04/2019	2		—	We met for a realatively short period to discuss and find an appropriate tutorial video for our upskilling and found the perfect tutorial on udemy. A course website that sells courses for many different programming languages and applications. We happened to find one specifically for Google and Alexa voice application developement; written by one of the original voice application programmers who mostly founded the grounds for which voice applications are build AND, it was on a 95% off sale so it was bloody perfect. We purchased it under one of our accounts on udemy and gave the details to one another so we could all login to that account and use it to watch the tutorial  Purchase history | Date | Total Price | Payment Type Ultimate Voice Dev Course - Google Actions & Alexa Skills | April 5, 2019 | $10.99 | $10.99 Visa | Receipt
WEEK 7 - Hours: 7				
9/04/2019	3		We learnt and went over a lot of the functionality and coding of the project as we met with both Ayush and Jeong; two of Sonnar's lead developers	When we first met, we were all a little nervous as we would be working directly with the companies lead developers but after meeting them, they seemed nice. I was also quite nervous personally because I would be working in coding languages I had never used before but was also excited to learn. We set up email correspondence with developers using emailing and connected them to our slack. We discussed how to get access to the code and they sent us emails right then and there to some of the code. We discussed how the current Alexa application works We went over some of the flow graphs for the UX design and discussed usability testing. Over all the meeting went well but I was quite worried as I had a lot of other work and was feeling very stressed with how much there was to do. I was also going away for a week during the break so I organised with my team that we would begin upskilling during the holiday and the week after when we got back so as to allow time for all of to learn.
9/04/2019	2		Our 7th lecture went over meeting outcomes & cotninuous quality improvement	Our 7th lecture I did not attend due to our client meeting on the same day which was one of our most important ones. I went over the lecture notes later that night. Some of our own meetings could take note from this lecture as our meeting documentation was very simple and basic so I hope to discuss the idea of improving our meeting documentation later with my team. The lecture went over the 5 P's of a productive meeting. A meeting should have a purpose or a reason to go to the meeting. A preperation like with how we contact eachother in a team to organise said meeting. A process or a direction for the team or participants; a path to follow to achivge the purpose of the meeting. In the case of our meeting earlier today with our client, our purpose was to gain information about the functional requirements and the programming skills needed and the process was to speak with the lead developers. Participation; which is just the people that are there and how much our meeting means to us a full team meeting with 100% attention works best for us. An progress; a meeting should have a clearly designated purpose and the meeting should work towards it
12/04/2019	2		—	We briefly met with our moderator on Friday to organise some plans and discussions we would have to have and shared some information about our project with Akbar. We also discussed the pressing issue of the fact that our client wants our project done so soon which would be an issue for us. • We talked a bit about the scope of the project • Talked about how to best approach the project • Discussed documentation and our logs • Discussed some specific coding details and upskilling details. • Discussed some user testing and timelines of the R&D paper.
MID-TERM BREAK - Hours: 30				
27/04/2019 - 28/04/2019	20		Lots about google scripting and the google action coding	Since I was extremely busy with a very large computer graphical programming assignment and AI assignment during the first week of the holiday and then away in Australia for the second week of the holiday and came back only on Saturday, I spent some of Sunday working on upskilling using the Udemy tutorial. I then fiddled around for ages with testing and programming some stuff with what I had learnt. I just went over the basic beginnings of the tutorial with language programming called dialog flow and worked on setting up some first project. The tutorial is actually really cool and goes over how to program for both Google and Alexa devices as shown here. Google uses what's called dialog flow to control how the user interacts with its devices Whilst Alexa uses it's inbuilt JSON editor in its Alexa Developer Console to control how a user interacts with its devices. For the project I will be programming in the ATOM IDE which is a really nice, very streamlined application for programming. Google and Alexa apps run off of Node.js and Jovo which are very powerful builders to compile code and run it using google and Alexa. To do this on windows I learnt how to use Cmder which is a very powerful Linux console for windows.  
27/04/2019 - 28/04/2019	10		Going over the entirety of the udemy course took about 10 hours. I learnt a lot about voice application models and how users interact with voice applications	The course was broken down into sections that described different application examples and went over how to create them from start to finish using the Jovo Framework. First though it started with teaching the language model that is the mostly the same across google and amazon, but jovo language model helps tie them together. Then it went over intents, inputs, and then the example apps. 
Week 8 - Hours: 11				
			—	I spent a huge majority of today building, writing up and cleaning up my log. I had a very simplistic and not up to scratch log in Excel that I was using before but

30/04/2019	6			found it was not enough and didn't look good enough so I moved to working in Word and made my log look really nice and built up. I also added pictures and information to each log that I had previously missed and formatted it nicely which I couldn't do in excel. I also got an email from our client saying that our project had to change because one of his lead developers had apparently already finished the project that we where supposed to do so I felt quite annoyed and worried about what would happen to our project. I immediately told me team and emailed Akbar about a meeting this week to try and organise what to do in response and I emailed our client to talk about a new project or continuation of the one that had been built. I also worked a bit on the tutorial more to learn as much as I could and planned to wake up early the next day to spend a few hours working more on the tutorial.
2/05/2019	3		—	I spent about 3 hours today working on documentation, Jira planning and more upskilling. I also organised a meeting with both the client for the following Friday (10th) and a coordinator meeting with Akbar on the same day, but later on at 4pm (10th). I then looked over my emails to check for any lecture notes but the week 8 lecture seemed to be catered towards part 2 students. It did, however, go over some important things I would have to look back at when my porfolio and logs are due near our hand in phase
5/05/2019	2		I worked for about 2 hours on more upskiling and continued to learn more about google actions and alexa skills	I actually really, really, really enjoy programming a language model. There's something extremely satisfying about writing out effectively conversations and predicting what a user could say in retaliation. I watched a bunch more of the tutorial and then fiddled around and made a whole bunch of tests and learning stuff that is available on my github.
Week 9 - Hours: 29.5				

7/05/2019	7		I learnt a heap more about google actions and alexa skills	For a while I actually found this whole project and paper extremely boring, tiring and extremely stressful but this is one of the first times so far that I'm really enjoying working on the project and upskilling. Jovo framework (one of the frameworks used for voice application programming) is insanely powerful and works a-synchronously with unit testing so the project is a lot easier to do with proper formal testing which is very cool. I still love doing the dialogflow for the language and conversations so when my team and I meet later for splitting up the work load I really want to put forward the idea that I can work on the dialogflow. A really nice thing with voice application is that barring any API's or anything, the base side of programming is very easy. It's essentially designing and making conversations which whilst in real life I'm not that bad at, with programming I love doing. Attached is an example of some diaglog flow. It's all stored in JSON and accessed via javascript. Following my tutorial, I was making a little Fortnite help app for both google home and alexa that could answer any questions you have about the game. Im didn't know too much so I didn't finish it, but it worked pretty alright in simulations. Also, I was working on a smart lock app for voice applications where you could request to lock or unlock your door. This was all part of my upskilling process
				
				`"what are all {itemTypeOne} and {itemTypeTwo} items",`
				`"what is {itemTypeOne} {itemTypeTwo} items",`
				`"what is {itemTypeOne} and {itemTypeTwo} items",`
				`"give {itemTypeOne} {itemTypeTwo}",`
				`"give {itemTypeOne} and {itemTypeTwo}"`
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				`"name": "itemTypeOne",`
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				`},`
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				`{`
				`"value": "explosives",`
				`"synonyms": [`
				`"explosive",`
				`"bomb",`
				`"bombs",`
				`"dynamite"`
				`]`
				
				`app.setHandler({`
				`LAUNCH() {`
				`this.$speech.addText('Welcome to your smart lock. Would you like to lock your door`
				`this.$reprompt.addText('Please say lock door, status of my door, or unlock to contr`
				`this.ask(this.$speech, this.$reprompt);`
				`},`
				
				`LockIntent() {`
				`let expectedLockPrompt = 'Your door is locked'`
				`let expectedUnlockPrompt = 'Your door is unlocked'`
				
				`let lockStatus = this.$inputs.lockStatus.value`
				
				`if(lockStatus == "unlock"){`
				`this.tell(expectedUnlockPrompt)`
				`}else{`
				`this.tell(expectedLockPrompt)`
				`}`
				`},`
				`});`

8/05/2019	2		—	My team and I had a bit of a panic attach on the whole presentation and everything, what with how our project itself was in shambles. We had a quick discussion and organised a meeting with Karen Phipps; our advisor for tomorrow, Thursday the 9th to discuss what we could do, what we need to do and if we could get an extension on our project mid review because of how our project was canceled/delayed massively. We also became worried that we would have to re-write our project proposal but both Akbar and Karen said, that it was not necessary so after some discussion and me sending an email about the issues, we calmed down a bit. Attached is the original email -----Original Message----- From: Nikkolas Diehl <bjy5305@autuni.ac.nz> Sent: Wednesday, 8 May 2019 2:36 PM To: Karen Phipps <karen.phipps@aut.ac.nz> Subject: Need help/have queries with our project and development. Hey, Karen I am Nikkolas Diehl, the team leader of my R&D team in part 1. My team inckudes Sundeul Donna Kim, Sanghun Kim, Justin Bishop, and Howard Zhu. We're working for Sonnar Interactive and we're currently having quite a lot of issues with our project. Firstly we had slight delays with first meeting our client and properly getting requirements. Because of this we had delays to upskilling but eventually got on with quite well. We where going to be working on a voice application for Google home and the goal of our project was to move their existing alexa application to Google; which in of itself was quite small of a project. However in the last week of the mid term break, our client notified us that our project was finished by one of his own lead developers and that we had to do something else. The problem with this is massive delays in our project and documentation, and the fact that we essentially have to find a new project and currently only have upskilling to show for our work. Following that, our client was away for the first week back after the break so meeting with him for new project discussions has been delayed and then meeting with our moderator has been delayed because of no new progress to report on. Our team is in shambles right now and extremely worried because of the upcoming presentation in two weeks. We're meeting our client this Friday to discuss a new project but we're worried we'll just be given another very small project with no real depth and longevity to it so we won't have anything to show for our presentation. At this current stage our documentation is good with logs and such but we've only been able to do upskillings due to huge delays at the beginning and then a complete cancellation of our original project at the end of the mid term break. We have no idea what to do in terms of the project due to this huge setback and we're worried we might fail the paper. We're also worried because, so far, the project via the client was quite small and any new ones we've had a look at so far have also been incredably small. Fully completable and deployable within weeks or barely a couple months. Can we please meet with you ASAP. Tomorrow most of us are free or all of us can be free from 10am-12pm or Friday anywhere from 9am-1pm
10/05/2019	3.5		My team and I learnt what type of product we would be switching to since the client had already finished our other product	Ayush; one of Jareks developers has apparently finished the entire project at 95% completion so we will have to discuss with the client a new project or some extensions to the completed project. We discussed some current existing apps we could expand on or develop. We decided on probably working on the memory game which is currently a standalone game not on the Sonnar dedicated application. We then discussed how we would split the team up into 2 to develop two versions of the app. One for alexa and one for google. We talked about audio engineering training, restrictions around developiong apps on Alexa, memory game mechanics, and finally discussed a m,eeting for next week for asset training.
10/05/2019	2		—	My team and I met quickly with Akbar to discuss our new project and talk about redocumenting our new product and how we would move forward. Considering that the two products where quit similar, we didn't have that much issue with moving the same documentation over.
Week 10 - Hours: 15				
11/05/2019	6		—	My team and I met over the weekend to re-write up the project proposal, change up plan, flow diagram and a mini UML like diagram for our new product. We spent over 5-6 hours working on the Saturday to finish as much of the work as possible but ended up moving the rest of the work load to the next day; Sunday. The change up plan can be found here: https://docs.google.com/document/d/1EC8oG6exPFZkm3buvyDUML-P3GRxBWXuHAzJ4qO_VAQ/edit?usp=sharing
12/05/2019	5		—	We spent about 4-5 hours working today on finishing off the change up plan, flow diagram and project proposal with all the new info needed and used for the new product. We also organised the team split up for the Alexa version and Google version of the product. Me and Justin where to work on the Google version and Donna, Hun and Howard where to work on the Alexa version
14/05/2019	2		—	My team and I went over some quick info with Jarek in our meeting on Tuesday and went over the assets that we would be using for the new product such as the sound library for animal sounds as well as some icons and glyphs that Jarek had bought specifically for the product. We also discussed the story and flow behind the memory game and went over some visual assets and UI interaction ideas. We put forward some score tracking ideas and how we wanted to store data on the user/player data. We where also given a small Alexa simulator example and discussed lambda database benefits. Also Jarek mentioned that an Alexa hackathon was coming up so we organised Donna, Howard and Hun to all go to that to better learn the Alexa code base. We then discussed the Jovo framework that me and Justin planned to use for the google version of the application and discussed diaglog flow
17/05/2019	2		—	The team and I met for only 2 hours to quickly write up a status report for Jarek, Akbar and the paper as a way to quickly show where we where up to in terms of development. By this point Howard, Hun and Donna had all gone to the hackathon so had quite a lot of work already done on the app so me and Justin became determined to get some actual product development done and try finish it off during the semester break due to exams getting in the way of spare time
Week 11 - Hours: 7				
19/05/2019	2		—	Me and justin met for a quick 2 hour discord chat to discuss and start programming the google version. Justin was only there for a short time as he had to go for some family matters but I built up some of the basic intents so that the application had a starting and introduction phase. I also did some work to finish off the language model and getting it ready for all the intents we needed to add.
21/05/2019	5		—	Me and my team met for a very long production and documentation meeting to finish some work and get ready for the final presentation to our coordinator and moderator. We went over and finished: • Finished remaining sections in the mid-term status report • Created work logs document and started filling it out • We took a small break at 2.30pm and me and Justin discussed how we wanted to move forward with production and decided on a few dates during the semester break where we would work on it together • We added in all our combined work logs into our massive work log document which was supposed to be used for the final presentation of the semester/midterm status report
Week 11 - Hours: 2				
30/05/2019	2		—	We met for a short meeting with Jarek to discuss current progress. He said that our mid term review would be set up during the actual exam weeks, around what would technically be called Week 13. We discussed what we would need to include in the review document and made some small progress towards getting that ready. However we where all extremely busy with exam planning and study so we didn't do too much work.
Week 12 - Hours: 2				
9/06/2019	2		—	The team and I met again for a short meeting on Sunday night. We had been very busy during the week of Week 12 due to exams and final study preperations so no other work was done during this week. We quickly went over all the documents we where going to show the next day at the mid-term presentation and delgated slides to team members and created and formed what was going to be on each slide. We also planned the flow of the presentation which didn't take too long. We discussed to meet again the day after before the presentation to practice and print off documents that where needed
'Week 13' - Hours: 2				
10/06/2019	2		Akbar and our moderator mentioned after the presentation of our current Alexa version that the flow of user interaction felt clunky and quite slow which gave us ideas on how to improve	We had our presentation on the Monday after the semester had offically finished due to our original issues with our client changing our product intention. But over all besides all that the presentation went extremely well. We documented everything really well, spoke very confidentally and discussed exactly we where at current state and what we would need to be working on in the semester break and following semester. Plus we also showed a mostly working Alexa version of the product which impressed both our moderator and coordinator (Akbar) which made us very pleased with how we've been going.
Semester Break - Hours: 40				
10/06/2019 - 14/07/2019	40		Over the course of the semester break, me and justin worked on finishing off and building the Google version of the product	Justin and me spent the holidays working on the product and finishing it off. In total this only took us about 40 hours or so due to the fact that the product without any databasing or complexity is quite small. We had some hicups and annoyances with programming and upskilling along the way but over all the application development was fun and easy

14/07/2019				

SEMESTER END

Semester 2

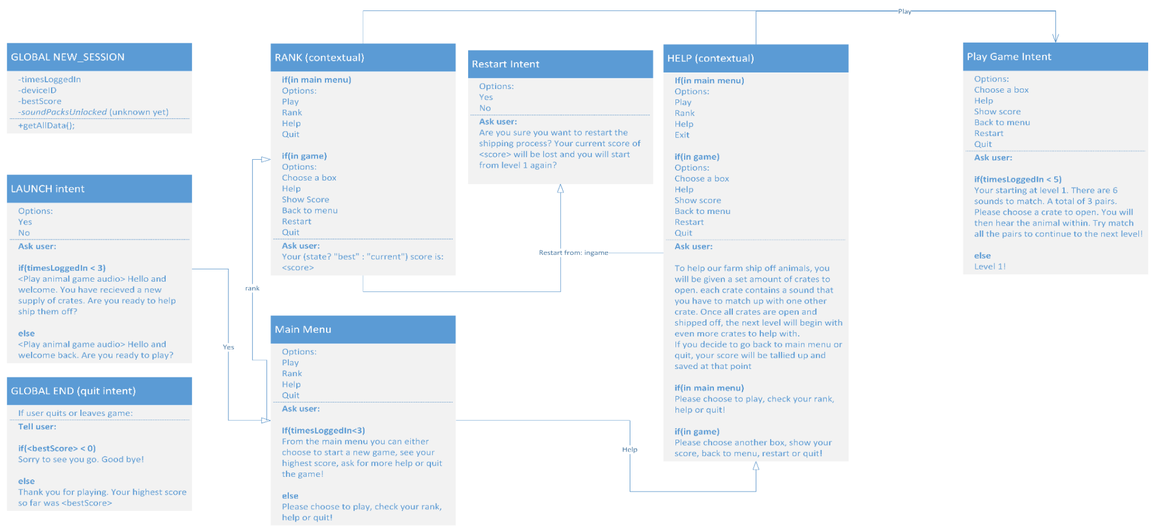
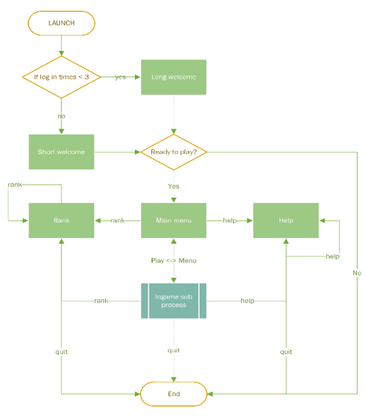
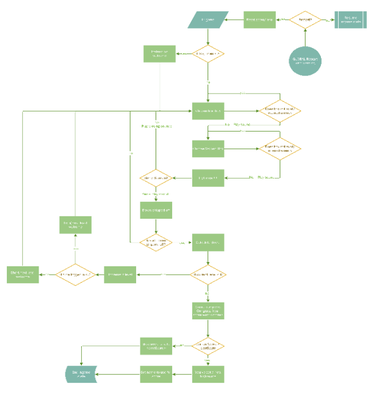
Week 1 - Hours: 14

15/07/2019	2		—	Quick meeting with my team to discuss our new state for the new semester and email our coordinator and client to organise meetings between them to show our progress over the holiday
17/07/2019	2		—	The team and I met up for a quick progress report for eachother to see where we were at and to creare a new availability time table for semester 2
17/07/2019	10		I learnt a lot more about the Jovo framework that Justin and I where using to build the Google version of our voice application	Across the day, since I did not really go into university on Wednesday's, I worked on finishing off the base game that we set out to make. A lot of work still needed to be done such as adding the lambda runtime, the dynamo database, and the UI, but the basic core concept of the game was finished. This build was the first function complete version of the game with most of the front end features finished. **Finished Base game** Browse files - Still need to add lambda - Still need to add DynamoDB - Still need to test on a phone - Still need to add UI - Updated Jovo - Added to language model with back to level select intent and reworked BoxIntent - Removed reset intent and skip intent JS - Added userLevelSelected variable and outSideSpeech variable - Added inGameSounds array for random shuffeling based on level count - Completely finished level selection with dynamically unlocking levels - Added game initialisation stateless intent to set up the array that you play on - Added entire ingame State with multiple intents including box intent, RankIntent, openedIntent, help intent, back to menu intent, back to level selection intent, exit intent and an unhandled intent. - Added WinStatelessFunction stateless intent for the winstate - Added resources for failing or correctly guessing sounds - Added two new functions - checkEveryBox which checks if you've won or not - shuffle(array) which takes an array and mixes it up. master Arniox committed on 17 Jul 1 parent da13e4c commit df11cd5dff7eb0230bb49d1e40eea6c03e84ebe2

Week 2 - Hours: 8

24/07/2019	2		—	Another quick meeting on Wednesday during our R&D lab period to discuss what we where going to show and so on with our client the day after. We made some progress with actual development and showed eachother what we've done so far on the actual product
24/07/2019	3		—	I worked for a few hours Wednesday night on cleaning up some of the code for the Google version of the application. I updated the jovo frame work, made some recognition and checking functions and cleaned up the voice responses for the user to gain better clarity from the game. NDA
25/07/2019	3		Jarek met with us and gave us some info on how we could improve our product and the flow of our language model and user interaction	We met with Jarek for a relatively long meeting to discuss and show our current progress we had made over the holidays. We showed him both versions of the application running live on both Alexa and Google platforms and discussed how we wanted to move forward. He gave us some info on the client side where he wanted us to modify the language model and allow the user to better interact with the application. We went over the phone application he was referencing this entire time and showed us how he wanted the flow to run which we took on board. We also went over how we should create a report to show the pros and cons on using Jovo for the google version of the application as well as him telling us he wanted to see a flow diagram and UML diagram with the changes that he wanted us to implement

Week 3 - Hours: 8

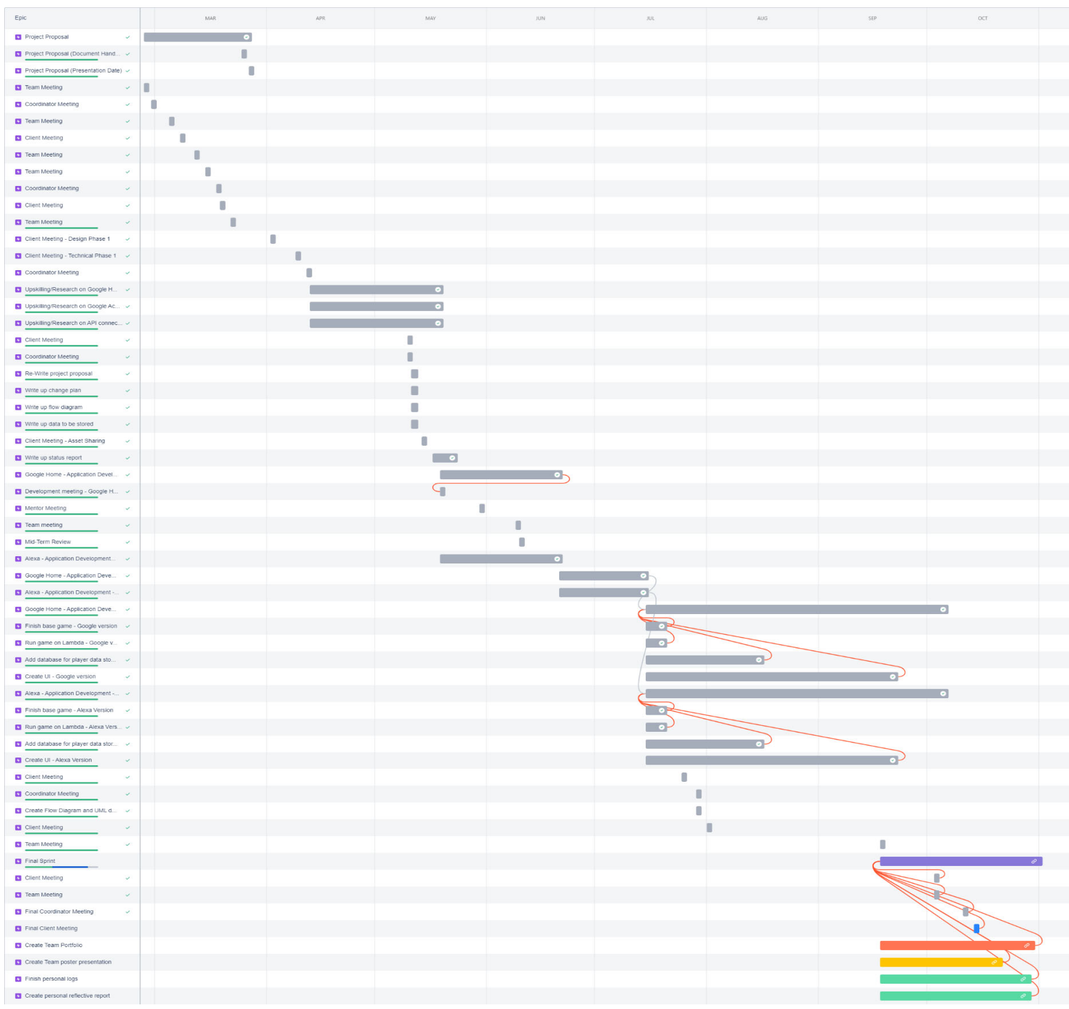
29/07/2019	2		—	Had a very quick meeting with Akbar as a team to discuss the meeting we had with Jarek and to discuss what documentation and assignements we would have this semester and what work would be required of us. He also let us know that he was quite happy with how we where doing and how our mid-term review went really well and he was pleased we had actual evidence of our work to show during the review
29/07/2019	4		—	Had a meeting with the team and I to discuss the game ending for users. We also created a UML diagram for the new ideas that our client had for fixing up some of the game flow. The attached diagram images can be found here: UML Diagram - https://tinyurl.com/umlDiagramR-D Flow Diagram - https://tinyurl.com/flowDiagramR-D Flow Diagram Sub Section - https://tinyurl.com/flowDiagramSubR-D   
1/08/2019	2		Learned a lot more about what a client wants to see in game development and application development	The team and I met up with Jarek for a quick meeting to go over our flow diagrams and discuss what he would like to see from our final semester of development. We discussed how the user might get stuck in a loop if he keeps failing and how there needs to be more user prompting from the application so that the user can't get stuck. Contextual help was discussed and we planned to implement that into the application. I was also personally asked to make a small report on the pros and cons of the Jovo Framework since it was a very new, fully open source framework for voice application development, the client was slightly worried the application might; in future; fall apart. We also discussed high score implementation and how the client wanted our database set up and how the user would be able to request his high score data.

Week 4 - Hours: 2

4/08/2019	2		—	I worked for a short time to fix up some grammer in the application code, and then did some research on the UI capabilities for the google version of our voice application

Week 5 - Hours: 0

Week 6 - Hours: 14				
18/08/2019	10		—	Justin and I worked for a long time on Sunday over discord to update a lot of the flow of the game. We added a new state machine for the levels and completely redid the start state and a lot of the main intents so that it took your number of times logged in, into account and altered the responses it gave based on that number. We then implemented Jarek's ideas about contextual help and making sure the user didn't get stuck buy counting the number of times the user failed at answering a question and then if they failed too often, the application would either exit the app with a good bye, try again message, or a back track into the main menu to try and help the user understand what they did wrong. We also updated Jovo and rebuilt the project with some small changes to the language model and redeployed to lambda so that the game was now running on the lambda service. **Updated some of the flow** Browse files - Added new state machine (const object) - Added changing flow to the start depending on how many times the user has failed at answering correctly - Updated Jovo - Rebuilt project and added some new stuff to the language model as well as removed the name intent - Re-deployed the build into bunel.zip Co-Authored-By: jastin123 <jastin123@users.noreply.github.com> master Arniox and Jastin123 committed on 18 Aug 1 parent a334354 commit 170d6f93bc48c357dd7cd2de78171f898098a1aa
18/08/2019	4		—	Just and I did another coding session on a discord call and worked on a lot more of the flow. Fixed a lot of the unhandled intents that control how the game replies to the user when they fail too many times at answering questions. We fixed up the ingame state as well so it properly got a dyunamic unhandled state. Some other small changes and fixes where made to the flow of the entire game. The last few things to do for a finished product where to: - Add the database connection, add proper box selection as the client had requested so that the user can only choose one box at a time. - Add a proper win state. - Add a proper leveling up system as per the clients requests. - And add a proper restart intent to restart the game and thus all the levels **Updated the flow some more** Browse files - Main menu is now properly flowing with dynamic unhandled intent - Ingame state is now properly got a dynamic unhandled state - Level selection, name selection, play game stateless function and some other minor thins are removed for proper flow. This also massively reduces the language model NOTES: - We are using an inbuilt google intent that was created directly from dialogflow.com. This intent is not 100% visible within the language model. The intent re-directs any quit intent to the END intent located in the app.js which allows the app to say good bye one last time OTHER THINGS TO DO: - Add proper box selection so that the user chooses one box at a time - Add proper win state - Add proper leveling up system - Add proper restart intent to restart the game and thus all levels. Co-Authored-By: jastin123 <jastin123@users.noreply.github.com> master Arniox and Jastin123 committed on 18 Aug 1 parent 170d6f9 commit 10bc2e7c858d5e460d21765cc5d58d8b33c2ec22
Week 7 - Hours: 4				
29/08/2019	2		—	The team met with Akbar for another mentor meeting to discuss what Jarek had gone over with us and what we needed to complete to finalise the product and finalise the documentation for our project. We quickly reported the progress we had on the google and alexa version of the product and discussed the poster demonstration and what we needed for that
29/08/2019	2		—	The team met for 2 hours and discussed what was needed of each team member during the semester break and what was needed for the final presentation and portfolio. We discussed exactly what documentation and layout was needed for the poster presentatiuon and went over what was needed for each of our personal reports and team portfolio. We then quickly went over what we planned to complete within the 2 week break and concluded that we should be able to get to about 99% finished by the time the break was finished. We also talked about, and demonstrated how we would combine the two databases from the google version and alexa version so the databases would hold scores across the entire user base of the application. We then confluded by listing out exactlty what was left to complete and updated the Jira
MID-TERM BREAK: 32				
2/09/2019	10		—	Over the duration of the mid-term break, I worked with Justin and alone to finish off the application as much as possible. A lot of my personal contribution occurred in the first week of the break as the second week was entirely filled with me completing alot of other, very large responsilibities for other papers. On the 2nd of September, I personally worked on fixing up the flow for the ingame state so that it would be more accessable to users. The minimum tries and tries where added for each level to keep track of how many failures the user did during the ingame state which would; if the failure count was higher than the minimum tries; back track to the main menu. I also made sure the number of times logged in was properly counted and fixed a whole heap of spelling mistakes within the grammer that is used to reply to the user. The box intent for how the user selects boxes was completely reworked and changed so that the user only selects one box at a time. Added a bunch of console logs as well to track issues that we still might have. Also, the reset functionality was added.
2/09/2019 - 15/09/2019	20		—	Over the rest of the break, me and justin worked on finishing off the application into a state that was nearly ready to hand in. The dynamoDB was added and stored the users times logged in and the highest score they've gotten. Initially the database was set up to only work with the google version of the application but later this was rectified and the two version where merged to work with eachother. ▼ Item {2} ▼ userData Map {1} ▼ data Map {2} bestScore Number : 21000 timesLoggedIn Number : 32 userId String : cbd42473-c33e-482c-b5c9-e03fa4bac32b
15/09/2019	2		—	Justin and I met on the Sunday before the break ended to quickly go over what Justin had worked on in the second week of the break (as I was busy for that week) and briefly worked on making sure the newest version of the google application was running and working with the current lambda solution and dynamo database.
Week 8: 0				
Week 9: 0				
Week 10: 5.5				
3/10/2019	2		—	The team met with Jarek at media design school in lower auckland city to show off the current progress we had for both version of the application. Both versions where nearly done and Jarek just wanted some final cleanup of the product before we handed it in to him so he wanted to meet again, one last time in a week. During this meeting we went over the polishing steps Jarek wanted to see, and discussed some issues we had with the two version and the restrictions that existed for the google version. Jarek also talked to us briefly on what might be needed or wanted in the poster presentation. We also told him that we where missing some art assets and if he could send them to us so we could finish off polishing the game. Jarek also mentioned that if we had time in week 11/12 when we meet him next, that we could do a small usability test with some students from media design school or AUT for a bit more data on our poster presentation
3/10/2019	3.5		—	The team and I met after we met with Jarek to start writing up our group portfolio and construction our poster for the presentation. We discussed the assets we would need for the portfolio and started pulling them together and downloading them from our google drive shared folder. We formatted the basics of the website and I actually downloaded our entire messenger logs from facebooks data requesting system and implemented them into the website as communication logs. Justin also started working on the executive summary for our project and we concluded the meeting by delegating out the work load for the weekend for our team members to finish off and planned the next meeting.
Week 11: 12.5				
9/10/2019	2.5		—	Had a realitvely long team meeting to go over what we currently had for progress and concluded how much we had left to do. Justin also finished off the executive summary and I sent it to Karen under our team name. We then worked briefly to create a framework for the poster and got it all set up to keep working on it with Jarek as he said he would give us some tips on what to do and what the markers where looking for in the poster.
			—	Had a short and brief meeting with Akbar as our last coordinator meeting and quickly discussed what was needed from us and what was due.

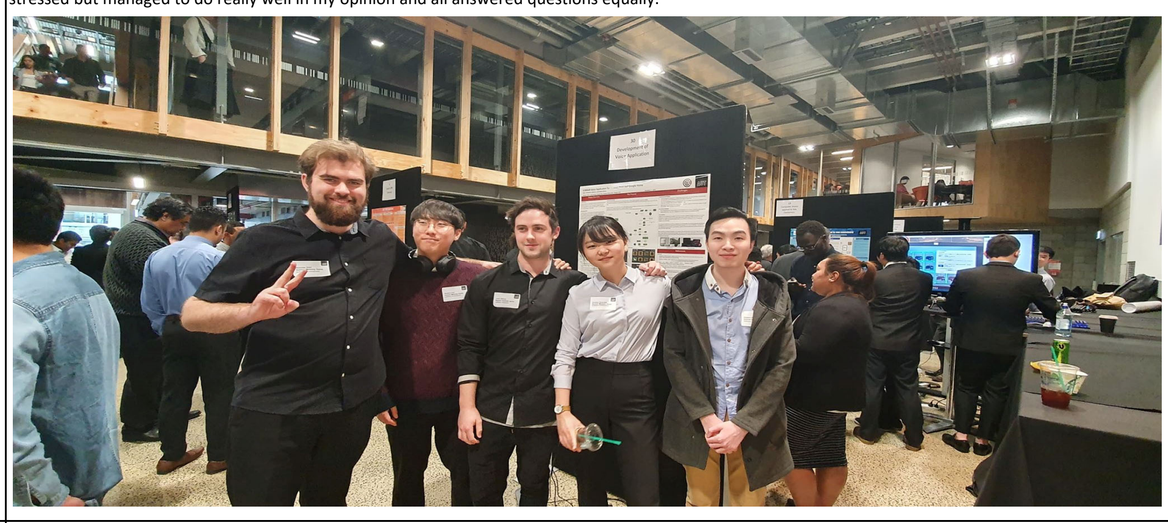
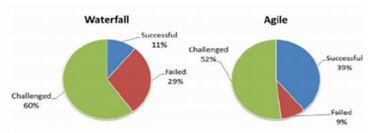
11/10/2019	2			- Poster presentation on the 24th of Octobor. - Portfolio due on the 1st of November - Personal logs and personal reflective report where also due on the 1st of November We demonstrated the two version of our application and showed him the UI design and gameplay. He was relatively happy with the design but said we shouldn't explicitely bring up any issues or bugs we had with the game during the poster presentation and instead should only demonstrate what we had finished. He was also relatively happy with the google version, but pointed out some glaring issues that needed to be addressed. Luckely these changes where very small and very recent so we concluded we could finish the polish very quickly over the weekend. Akbar also gave us some advice for the reflective report and said he wanted to see all the work logs and reflective report so told us we did need to finish them and send them to him.
13/10/2019	8		—	I have been working throughout the day on finishing off updating my personal logs and updating Jira so that we had documents completed and my personal documentation was finished off. The exported image of our roadmap so far for our entire project can be found here: 

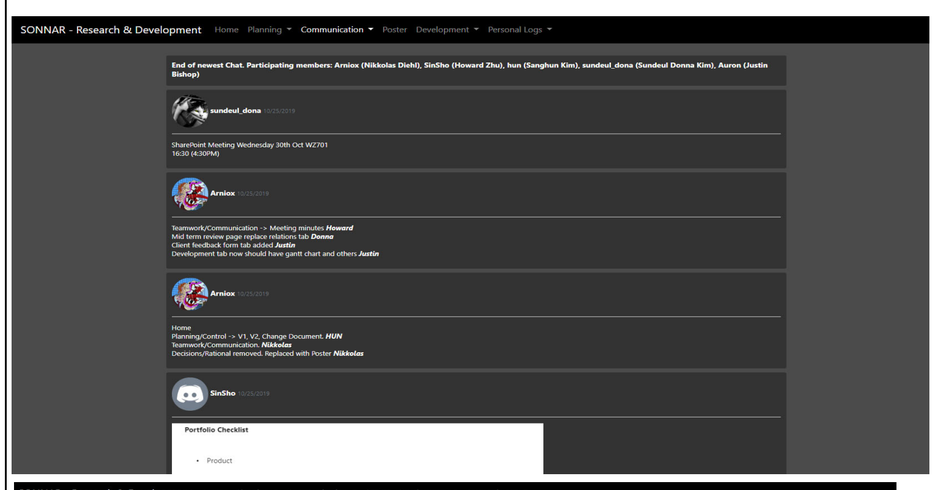
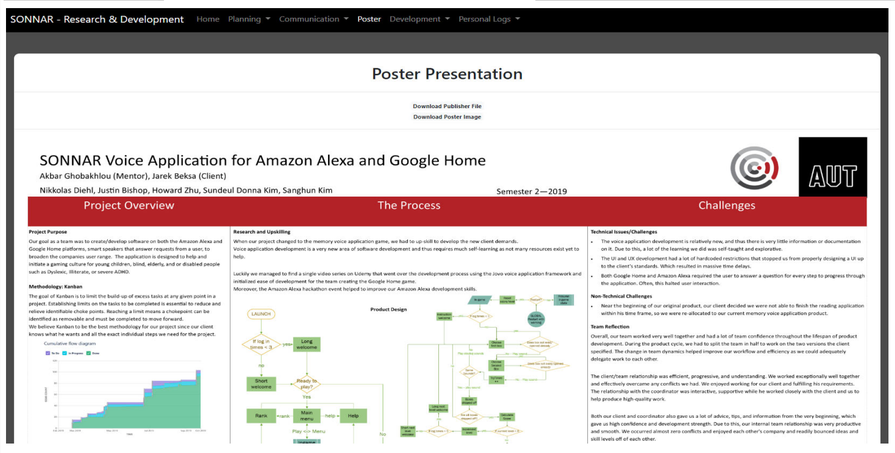
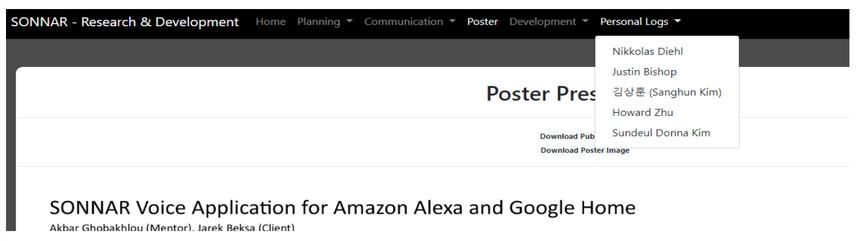
Week 12: 19

14/10/2019	2		—	We met with Jarek for a shared lunch to discuss the current project and hand over process that jarek wanted us to go through. We spent a good 2 hours and discussed how we would give the project and documentation to one of Jarek's developers
16/10/2019	4		—	Me, Justin and Hun met up to discuss and create the framework for the poster as it was getting near the time for the poster presentation and we wanted to start early and get feedback early from our moderator and client. We spent quite a long time setting up the basics of the poster and spoke to some fellow peers on their framework as well to see the general idea of what people where doing. **Development of Voice Application** **Team Meeting** **Date & Start/End Times:** 16/10/2019 12:10pm - 3:50pm **Location:** WZ703 **People Present:**Justin Bishop, Sanghun Kim, Nikkolas Diehl **People Absent:** Sundeul Donna Kim, Howard Zhu **Purpose:** To finish a draft version of the Poster **Objectives:** To finish a draft version of the poster that we can give to the client and mentor for feedback Time / Agenda Item 12:10 / Meet up 12:15 / Choose layout and colour design for the poster 12:25 / Fill out text fields of the poster - Project Overview - The process 1:30 / Lunch break 2:10 / Return from break and continued working on the poster - Challenges - References 3:30 / Sent draft version to client and mentor 3:50 / Conclude meeting
16/10/2019	1		—	I sent the poster framework to both Akbar and Jarek as they had asked for a copy and wanted to give some feedback. I immediately got feedback from Jarek but Akbar didn't say anything at the time. I then spent a quick hour fixing the poster up to follow Jarek's advice
17/10/2019	7		—	I started work on my personal reflective report. I wanted to start early so that I had plenty of time to procrastinate and I decided that the easiest way to work on it was to split up the different sections and work on one section per day/roughly one section per 2 days. Today I spent a really long time setting up the report and researching some papers that could help me start out with some good references. I managed to finish the abstract, acknowledgments and introduction. Oct 17 You uploaded 4 items Nikkolas Diehl - Personal Refl... Project-Proposal-Requiremen... DCT-Individual-Assessment-C... DCT-Individual-Assessment-C... Oct 17 You created an item in Personal R&D Personal Reflective Report
19/10/2019	5		—	After more procrasination I did some more work on my reflective report. I spent about 2 hours cleaning up the introduction and adding a reference or two and then spent about 3 hours working on the project evaluation structure and content Oct 19 You edited an item Interpersonal process recall a... Oct 19 You uploaded 4 items ContentServer.pdf 08607356.pdf Interpersonal process recall a... 06834681.pdf Oct 19 You edited an item 06834681.pdf Oct 19 You edited an item Nikkolas Diehl - Personal Refl...

Week 13: 18.5

			—	My team and I worked on polishing off the poster and adding the content filler that we need. We took Akbar and Jarek's advice and cleaned up what needed to

21/10/2019	4			be cleaned up and added references, images and etc.. **Development of Voice Application** **Team Meeting** **Date & Start/End Times:** 21/10/2019 11:45am - 2:20 pm **Location:** WZ703 **People Present:**Justin Bishop, Sanghun Kim, Nikkolas Diehl, Sundeul Donna Kim, Howard Zhu **People Absent:** **Purpose:** Polish the final version of the poster **Objectives:** After receiving feedback on our poster we now have to make the recommended changes and complete the final version to hand in Time / Agenda Item 11:45 Meet up 11:48 review what recommended changes need to be implemented to the poster 11:59 Import each section of text within the poster to grammarly to correct all grammar errors within every section 1:15 insert cumulative flow diagram of overall work done and continue editing wording of each section 2:05 Put final poster version on the team's google drive and email finished version of poster to Mentor and Client 2:20 conclude meeting
22/10/2019	6		—	I was very busy with poster presentation preperation, but I made time on one of my spare days to work heavily on the reflective report. I managed to finish off a huge chunk of work by first cleaning up the introduction more, finishing and cleaning up the project evaulation section. I then started and finished off the theory links section of the report and cleaned it all up with Grammarly and corrected all my misstakes. I then wrote up the bullet point framework for the next section. I had been doing that for each section; writing up a bullet point list *framework* for how I wanted to write the section. And then pulling it appart and expanding the section Oct 22 **You** uploaded 3 items 08290148.pdf ContentServer.pdf 08607356.pdf Oct 22 **You** edited an item Project-Proposal-Requiremen... Oct 22 **You** edited an item Nikkolas Diehl - Personal Refl...
23/10/2019	2		—	The team and I met to quickly polish any remaining artifacts and add a few last minute touches such as our cumulative work report and then Donna and I went down to pink lime to get the poster printed out. SONNAR Voice Application for Amazon Alexa and Google Home Akbar Ghobakhlou (Mentor), Jarek Beksa (Client) Nikkolas Diehl, Justin Bishop, Howard Zhu, Sundeul Donna Kim, Sanghun Kim Semester 2—2019 AUT Project Overview / The Process / Challenges Project Purpose Research and Upskilling Technical Issues/Challenges Methodology: Kanban Non-Technical Challenges Team Reflection Project Beginnings Objectives The Product Memory Game Congratulations! Your score is 3785! Do you want to play again? References Acknowledgements
24/10/2019	4		—	The team and I finally had our poster presentation. It went suprisingly well but was extremely nerve racking and interesting to say the least. We felt very stressed but managed to do really well in my opinion and all answered questions equally. 
25/10/2019	2.5		—	The team and I where quite happy and relieved that we had finished the poster presentation but where still hard at work on the portfolio. On Friday night, we worked on the portfolio and added a bunch of documentation and documents for the hand in zip. We then delegated out work for each of us to do on the weekend for the portfolio website **Development of Voice Application** **Team Meeting** **Date & Start/End Times:** 25/10/2019 3:30pm - **5:00**pm **Location:** Discord meeting (online) **People Present:**Justin Bishop, Sanghun Kim, Nikkolas Diehl, Sundeul Donna Kim, Howard Zhu **People Absent:** **Purpose:** Work on the portfolio **Objectives:** Progress on the portfolio Time / Agenda Item 3:30 Begin call on discord 3:35 Discuss what needs to be done for our NDA 3:40 Convert all meeting minute documents into PDFs 4:05 Add poster file to portfolio 4:25 Discuss plan to delegate tasks to each team member - Justin to do: - Add client feedback form tab - Development tab should now have gantt chart and others - Sanghun to do: - Change Planning/Control sub-tabs to V1, V2, Change Document - Nikkolas to do: - Decisions/Rational removed, replaced with Poster - Sundeul to do: - Mid term review page replace relations tab - Howard to do: - Teamwork/Communication, meeting minutes. 4:50 Sharepoint meeting organized - Wednesday 30th October - WZ701 5:00 Conclude meeting
Week 14: 18				
26/10/2019	5		—	I worked across the entire Saturday on my reflective report and wrote up the rest of the theory and links section. I added heaps of references and images to increase the amount of knowledge the report exuded and I cleaned up a lot of the other sections. I then started writing up the beginings of the personal reflection section but didn't really finish it time and spoke to him briefly concerning the project use and how we could research voice application design in the future. Our team then made some final arrangements for the full product hand over and left it at that. When discussing any other methodologies and use of any other research plans, Bibik (2018) believes that whilst there are still failures, an Agile methodology will always be stronger than a traditional method. He states that the issue with methods like Waterfall is that if there is a big scope, it may take months or years until results can be delivered. "The success rate of big projects executed in this way is alarmingly low [...]" (Bibik, 2018).  *Figure 2: Waterfall vs. Agile (Standish Group, 2015)* Bibik (2018) firmly believed that traditional software development processes were not flexible and too slow for project development. Our project and the way our team worked through the process of Agile Scrum and Kanban are successful due to the way Agile works. We were able to make deliveries at specified dates and work in an adaptable way because we chose to avoid the strict framework of Waterfall and similar methods. Our team adapted quickly to the change presented to us in the design phase. Whilst we were challenged throughout the project, the theory held up in our real-world stage and we were successful in delivering the final product. Our team could have probably avoided the use of complex hybrid systems with Kanban and reduced our risks even more. According to another article, Kanban would be more efficient for a support team or a
			—	More work was done on the reflective report and I effecitively finished it and handed it in. I finished cleaning all the other sections up, wrote up and finished

28/10/2019	6			the reflective section with references and etc. I also finished off the rest of the report with the conclusion, added all the new references into the reference table, created a figure table and cleaned it up in grammarly. I then handed in the final copy on Monday Conclusion: In conclusion, I believe that whilst there were many issues we faced, and a unique and perspective-altering project to work on, the important lesson from this paper had been personal growth. Both personal and professional growth has been huge for my team and me, and there are a lot of skills and tools learnt that can be used in the future. I have learnt how important project management is to a successful project and how important a scope management and time management system is to a project. The project was a complete success by its finalisation period, but I do wish we made improvements much earlier. The final product will be handed over to our client and will be used to further his goals as a unique gaming and business initiative. We hope that he uses the final product for its initial intention and spreads the word about voice application and voice gaming to many different cultures and groups. When researching and reflecting on the link between the theory and my practical experience, I found quite a lot of connections. Most studies used in this reflective report perfectly describe what we did throughout our project and also gave me a lot of insight into how I can better prepare for the future. There will always be unpredictability when working on a large project in the software development world, but I hope now I can better understand where I am going. Personal growth is the final frontier of this whole project. This report has disclosed a tremendous amount of personal growth based on my professional experiences dealing with my team, the client and the moderator. Before starting this project, I hoped to gain some real-world experience when working on a large project and I feel that from this project I have gained a substantial amount of professional experience. The most critical growth that I believe has occurred throughout the entire project has been the perspective change and the ability to process and view a professional perspective from my working peers. Without this important growth, I might struggle to find my place within the software development industry and any other industry for that matter.
29/10/2019	4		—	I came into university on Tuesday to work on my delegated task for the portfolio. I worked on updating the messenger logs, adding the discord logs, adding the personal logs pages, and adding the poster page. Because I am somewhat of a perfectionist, I took alot longer than I needed to do this   
30/10/2019	3		—	I worked for a solid 3 hours on updating my logs and adding infromation and avidence where it was lacking. I also met with my team and worked on finishing the portfolio before handing it in. This is probably the last official meeting our team will have which makes me quite sad to see everyone go.