**Plan and Progress**

Our group really was formed from Week 1 even though it wasn’t until a few weeks later that we were assigned groups. The reason for this is we all had similar interests, we understood each other and seemed to get along well. In this tutorial we spoke about many ideas – our tutor asked us what ideas we had. Our group suggested lots of different ideas like a Virtual Power Plant where as a consumer you can trade electricity to get cheaper prices, a robot that was a boxing trainer to assist you with developing your boxing skills and an app where you can hum a song and the app will recognise which song it is and give you the option to add it to your playlists (Spotify or Apple Music). We all thought these were great ideas and this is why we gravitated together.

When we came together as a group we had many ideas and discussed these during assignment 2. Assignment 2 finished and it was time to decide on our idea. Originally, we decided on the app that gives you an option to add the song to your playlist based on what you have hummed to the device. We wanted to really build a prototype and after working on this for a week we decided that the difficulty and our inexperience meant that this idea was not the right idea.

Based on this, we changed our idea to an Alexa skill that works on the device Amazon Echo. The skill would be gameplay where Alexa can play rock, paper, scissors with you or role dice for you. The vision was that this would work as followed:

User: “Alexa, let’s play rock, paper, scissor”

Alexa: “Sure, let’s play, are you ready? Rock, Paper, Scissors – Paper” (at this time the user would also select their move.

User: “Alexa, role me 3 6-sided dice.”

Alexa: “Rolling now, your dice has rolled 13.”

This vision moved from basic skills to full tabletop gameplay and support. For example: Alexa supports you in playing Monopoly by letting you know who’s turn it is, Alexa rolls the dice for you and then tells you where you have moved to. “User 1, you have landed on Piccadilly Circus, User 2 owns Piccadilly Circus, pay User 2 $50 in rent. User 1, you now have $350, User 2, you now have $870.” This will revolutionise the tabletop gaming industry and support people that currently can’t play due to disability or other reasons.

We decided that whilst this is our end goal that the scope of the project was slipping and that the original scope of rock, paper, scissors and dice roll stays as is. A second iteration post this project will definitely be the change to tabletop gaming.

As we had spent a few weeks changing our plan, we knew we were behind and had to make this time up. The developers began work on testing and trying out programming the Alexa skills and language and practiced with basic items such as “Alexa, what is the time?” and Alexa would use the time that is listed on the Echo. This gave the developers the practice in the Python language and using AWS Lambda. The plan was to start the development in Week 7 which meant that this would start next week.

We started discussing and writing out some requirements for the skill based on our original vision and feedback we had from our tutor and class. These requirements were discussion only and will be documented in the next week (as per the plan).

Some of the requirements we discussed were:

* As an Amazon Echo user, I want to be able to ask Alexa to roll me any multiple dice up to 20 sides so that I can hear the total number to play the game I am playing.
* As an Amazon Echo user, I want to Alexa to randomly generate the number based on the number and type of dice I have asked so that the dice roll is fair.
* As an Amazon Echo user, I want to be able to ask Alexa to play rock, paper, scissors with me so that I can play the game with another person.
* As an Amazon Echo user, I want Alexa to randomly generate either rock, paper or scissors when asked to play so that the game is fair.

The next steps of the project as per the timeline below would be to document the requirements and share them with the team through a knowledge transfer. Once the requirements are defined and documented, the team will then have a sprint planning session where the requirements are split in to weekly sprints (as the development time and testing time can be quick). The requirements will be prioritised based on value and dependency and assigned ‘story points’ which are estimated timeframes on when the requirement can be delivered.

Once this is done, the idea is to keep the project on track by working and delivering on each requirement. As referenced, the team will work in an Agile manner which means that requirements are prioritised, developed, tested and deployed in a quick manner. This is an iterative approach where we deploy requirements as they are ready so there is not one big deployment. This limits the risk of large issues on deployment and the time that it would then take to fix this. As we can deploy in smaller sprints, the chance of defects is smaller.

The team will have a daily stand up where each team member will discuss what they worked on the day prior, what they are going to work on that day and any blockers they have or anything they need help with. This encourages collaboration and support for each team member. In an Agile working manner, you will find that roles will often need to flex. As per our schedule, our roles will flex to support what stage the project is in. This creates the quickest pathway to completion.

The key call out, is that we are slightly behind schedule, this is due to other commitments and illness. There is room to catch up in the development cycles so each team member will need to work hard to ensure this is done.

The next step would now be to look for an investor. This is a great product and we have gained feedback from many people who can see the benefit in this. Not only does it give the opportunity for people that currently can’t play games such as the elderly or disabled, it also provides a mechanism to avoid cheating. Something that is really discouraged in tabletop games but often happens. The investor would be able to provide the finances required to get a skilled developer and extend the project team in order to develop iteration two – tabletop gaming eg. Monopoly. The investor can also assist with marketing the product and releasing the product to market.

**Roles**

**Project Manager -**  The group believes that this role was someone that we really needed. This role ensures that the project stays on track and on schedule. This role manages many aspects of the project including the risks, budget, schedule and scope. This role is imperative to the success of the project as if you aren’t keeping a close eye on the moving parts of the project, the project can fail.

**Business Analyst –** The reason that we assigned a business analyst was because that the idea is very new to all of us. We didn’t have a clear understanding of the Alexa skills and how they worked and we didn’t know what potential users of the Alexa skill would exactly want. Therefore, we thought it was important for the BA to do some research and share with the group. The BA also elicited our requirements based on what we expect the Alexa skill would do and then also sought feedback from the public (friends and peers) on what they would want out of the skill and translated this in to functional and non-functional requirements.

**Developer x 2 –** The developer is key to the project and will be the one developing the Alexa skill. Without this role – the project would not be possible. The developer will need to learn the programming language as well as the way the Amazon Echo is built and how you develop each skill.

**Tester –** The role of the tester is to test out each requirement to ensure it is working to the standard that is expected. Although we could have all helped with testing, sometimes items can be easily missed as this is not your core function. So, we decided that it would be key to have someone who can dedicate their time to the testing of each requirement.

**Risks**

The risks that the group has identified for our project are:

1. Resourcing – the group has other projects/subjects and work requirements that could impact the timeline of the project
2. Incomplete requirements – as the team is new to eliciting and developing requirements, the requirements may be incomplete as some things may be missed
3. Requirements not testable – as per above risk, the requirements may not be clear enough to develop test cases as the business analyst is new to the role
4. Scope change – as this is a new idea that is exciting and innovative, there may be scope creep as the team will want to make this project the best it can be
5. New Technology – the Amazon Echo is new technology and our developers are also new so this may cause some delays as these new skills and knowledge are learnt
6. Inaccurate estimation – as above risk, the new team and new technology may result in estimations being incorrect
7. Decision delays – as there is now owner to the product/idea (it is a shared idea), there may be delays in decision due to all parties having to agree
8. Legal and Privacy – the idea will need to fit in with privacy laws and any other regulation which may cause confusion and the need for a paid external resource
9. Speed to market – due to the development time and inexperience, another company may beat us to market
10. Product not accepted by users – the Alexa skill is not used or accepted by the public

**Personal Reflection**

As per the last assignment, we really need to start earlier. Unfortunately for this assignment a lot of the team members had other priorities whether it was other subjects or work. For me, I was really busy at work and had some deadlines to meet which meant that I was not as available as I was in the past. However, as we always do, we can come together and ensure that all parts of the assignment and project are done in time. As mentioned earlier, if I was to do the assignment again I would ensure we started earlier and worked through responsibilities at the very start. This would have meant that there were no last-minute stress and uncertainty if everyone was going to deliver on time.

**Timeframe**

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| --- | --- | --- | --- | --- | --- |
|  | Melissa | Caleb | Pete | Yousef | Aria |
| Week 1 | Idea generation, workshop everyone’s personal ideas as well as add new ideas. Refine the list to 3 ideas and vote on idea. 3 ideas were Alexa games – dice roll & rock, paper, scissors. Alexa language translation – say a sentence in your own language and advise which language you would like it translated to. Humming app, hum a song and the app will tell you which song it is. Voted on the Humming App. Started assigning work and planning what is required. | | | | |
| Week 2 | After assigning out the tasks required for the idea and what was required, it was decided that the idea was too complex and that the skills and experience that we had would not deem this successful if we were to pursue this idea. The group went back to the drawing board and decided on Alexa games which would be the ability to play rock, paper, scissors with Alexa and also to have Alexa roll dice for you. It was then discussed what this could form to and that it could become a support to all tabletop games. However, to avoid scope creep, we decided that this would be a later iteration. We assigned out the relevant parts of the assignment as well as discussed roles for the project. | | | | |
| Week 3 | This week as a group we worked on the presentation to ensure this was a success. Our presentation was based on our project idea and what was required to deliver this. This took some time working out the different parts of the presentation. | | | | |
| Week 4 | Melissa was assigned the following for the project: Plan and Progress, Roles, Timeframe, Risks and was the project manager on the project. | Caleb was assigned the Team Profile, Skills and Jobs and was the developer on the project. | Pete was assigned the Overview and Aim and was also a developer on the project. | Yousef was assigned Scope and Limits and Tools and Technology and was the business analyst on the project. | Aria was assigned Testing, Group Processes and Communication and was the tester on the project. |
| Week 5 | Each member worked on their parts as listed above in Week 5. We also spent time practicing our presentation and making the final tweaks. We delivered the presentation and regrouped after the presentation to give an update on where everyone was at. | | | | |
| Week 6 | As the project manager, Melissa started working through timelines, risks, budget and locking in scope. | Caleb and Pete worked with Yousef on developing the requirements as well as researching and learning about Alexa skills. | | Yousef began documenting the requirements from the group as well as from the feedback we had gathered from the public. | Aria also worked with Yousef to define the requirements so that when it comes to testing Aria knows exactly what needs to be tested. |
| Week 7 | Lock in budget, plan for mitigation of risks and documenting each of these. Reviewing and signing off requirements. | Finalise requirements and have each group member sign them off. Review any feedback and change as required. | | | |
| Week 8 | Run a sprint planning session by estimating t-shirt sizes for each requirement (this includes any other BA time required as well as development and testing), assign these requirements to sprints based on the dependencies (what requirements need to be delivered before another can). Sprints to be finalised and development work is ready to commence. | | | | |
| Week 9 | Attend daily stand ups with project team to ensure that development and testing is on track. Manage scope, budget and risks. Create plans if work doesn’t go according to plan. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected. |
| Week 10 | Attend daily stand ups with project team to ensure that development and testing is on track. Manage scope, budget and risks. Create plans if work doesn’t go according to plan.  Manage and assign change requests as required. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected.  Document and explore any change requests. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected. |
| Week 11 | Attend daily stand ups with project team to ensure that development and testing is on track. Manage scope, budget and risks. Create plans if work doesn’t go according to plan.  Manage and assign change requests as required. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected.  Document and explore any change requests. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected. |
| Week 12 | Attend daily stand ups with project team to ensure that development and testing is on track. Manage scope, budget and risks. Create plans if work doesn’t go according to plan.  Manage and assign change requests as required. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected.  Document and explore any change requests. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected. |
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| Week 14 | Attend daily stand ups with project team to ensure that development and testing is on track. Manage scope, budget and risks. Create plans if work doesn’t go according to plan.  Manage and assign change requests as required. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Development work on assigned requirements, self testing and handover to tester. Defect management by identifying issue and re-deploy for re-testing  Deploy any work that has been tested and signed off. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected.  Document and explore any change requests. | Test requirements in a staging environment as they are ready and sign off if requirements are met. Report any defects to the developers. Retest any defects.  Once in production, test to see if working as expected. |
| Week 15 | Twice-daily stand ups as development should be in final stages and ready for the last deployment. | Twice-daily stand ups and final development work. | Twice-daily stand ups and final development work. | Twice-daily stand ups to finalise all requirements and ensure all are complete and tested. | Twice-daily stand ups and final overall testing to ensure solution is working end to end. |
| Week 16 | Market the product now that it has been developed. This will initially be done through each members social media sites. Look for investor to help grow the business and assist with above the line marketing. Celebrate the hard work over the last 16 weeks. | | | | |