**Sprint Planning**

The goal for Sprint 1 was to first determine the tools and workflows that the group would use to develop the product and manage the group, followed by producing some form of working software along with additional documentation such as designs, test plans and risk assessments.

The current Product Backlog and Sprint Backlog for Sprint 1 (with assigned tasks) are shown below:

|  |  |
| --- | --- |
| **PRODUCT BACKLOG** | **SPRINT BACKLOG** |
|  |  |
| **ASSIGNED TASKS** | |
| Abishek:   * Write product test plan. * Write risk assessment(s).   Alex:   * Develop basic main screen.   Ann:   * Design app UI layout. | Michaela:   * Develop basic AR system. * Create a basic scannable image.   John:   * Write list of development tools/workflows. * Design user database. * Create user database. * Create PHP file to connect to database. |

**Meetings/Discussions**

**MEETING (In University) – Wednesday 6th November (06/11/2019)**

**MEMBERS ATTENDED:**

Abishek, Alex, Ann, John (Michaela absent)

**WHAT HAS BEEN DONE SO FAR?**

* John created a MySQL database to store user details and the products that they have scanned using the app. This has been exported into a .sql file alongside database designs using an Entity-Relationship Diagram and a Physical Model.
* Abishek created a test plan, comprised of the following sections:
  + Test – What test is to be performed.
  + Purpose – Why this test is necessary.
  + Expected Outcome – How the app is expected to behave during the test.
  + Actual Outcome – What actually happened in the test.

**ISSUES:**

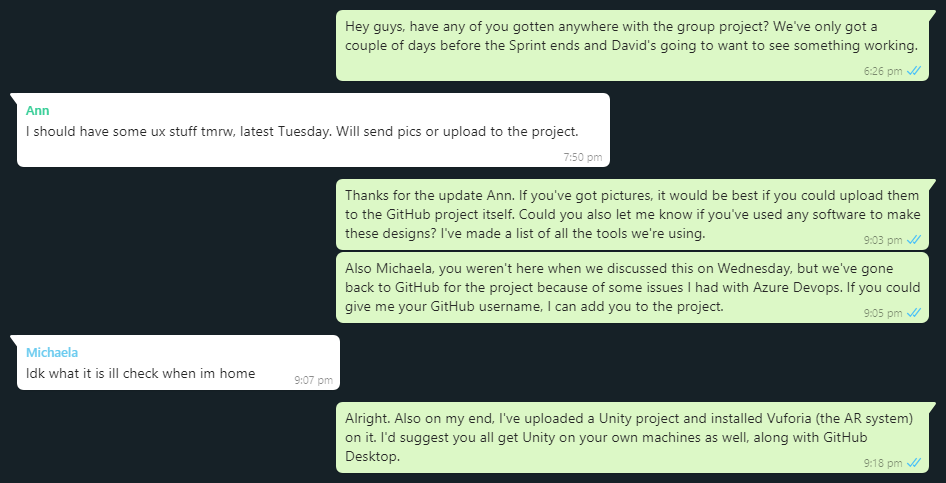
* Little work had been done up to this point due to uncertainty as to how best to produce the final product, such as what AR platform and other software would be used and how the product would function due to none of us having experience with AR development before.
* There has been a lack of communication so far, plus Michaela’s absence meant the group could not discuss the current situation with her.
* John has raised concerns about using Azure DevOps, as the workflow to manage the repository and files appears more complicated than GitHub, which team members are more familiar with.

**MEETING OUTCOMES:**

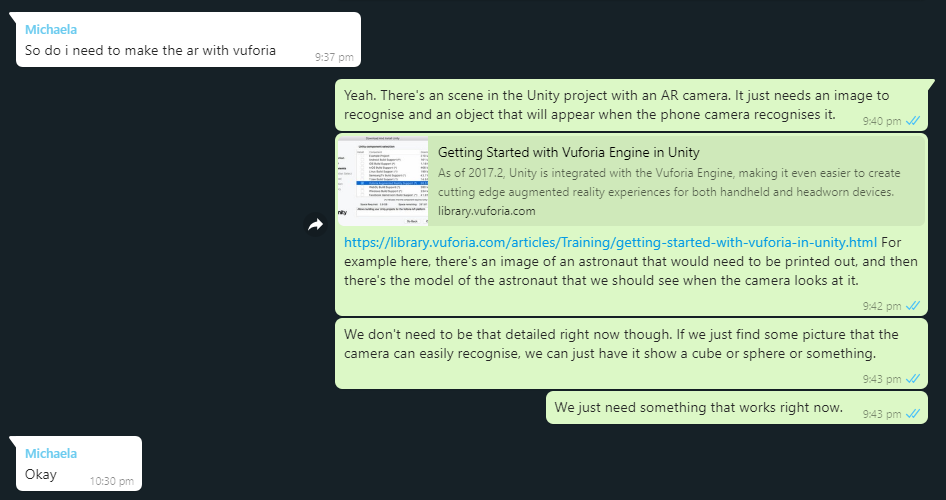
* The repository has been changed from Azure DevOps to GitHub, as the latter provides an easier way to handle changes and commits through its desktop app, making it particularly useful for large projects.
* Tasks for other members of the group have been agreed on.
* The tools for building the app itself have been determined – it will be created inside Unity 3D using the integrated Vuforia Engine.
* The current scope of the project has been limited to iOS devices only. If the project progresses far enough in the future, it may be possible to attempt building an Android version of the product.
* In terms of communication, a WhatsApp group has been created which the team will use to hold discussions outside of scheduled university sessions. This will also serve as a substitute to Daily Scrums.

**DISCUSSIONS (On WhatsApp) – Sunday 10th November (10/11/2019) – Tuesday 12th November (12/11/2019)**

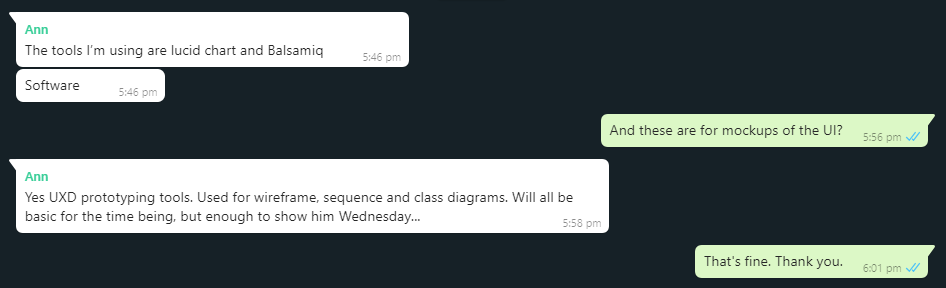
Since the meeting, John created a Unity project and set up Vuforia Engine so that other group members could download and use it. By Sunday however, there had still been no communication on WhatsApp, so John sent a message to the group for an update.

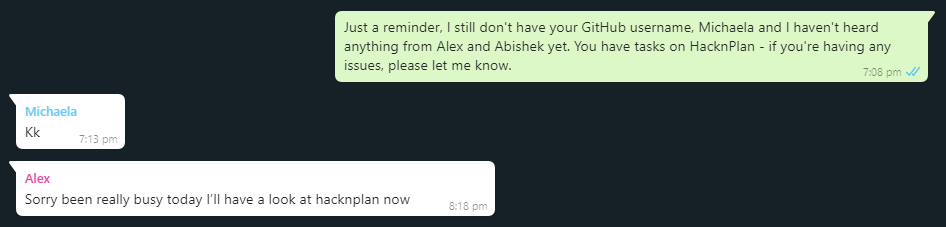


Michaela was also updated on the change of repository and given guidance on using Vuforia in the Unity project.

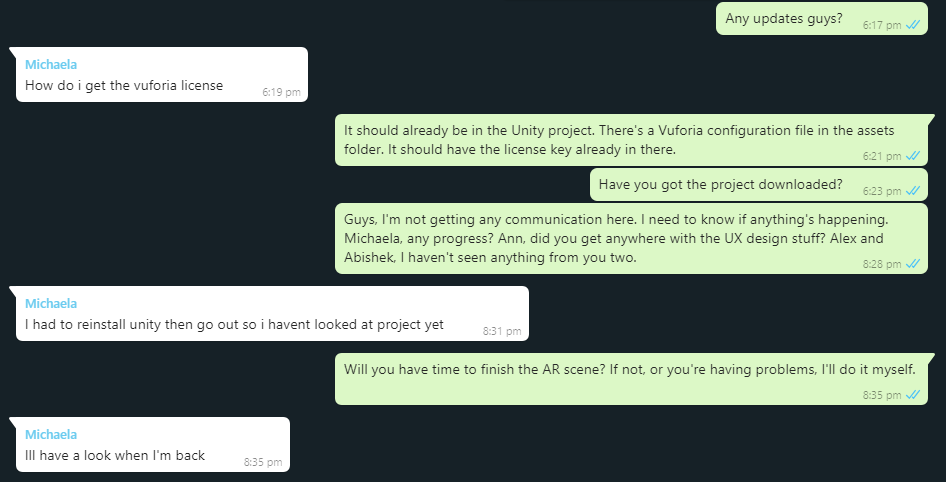


On Monday, Ann provided the names of the tools she was using for her UX designs. Michaela had not yet given her GitHub username and there had been no updates from Alex and Abishek.



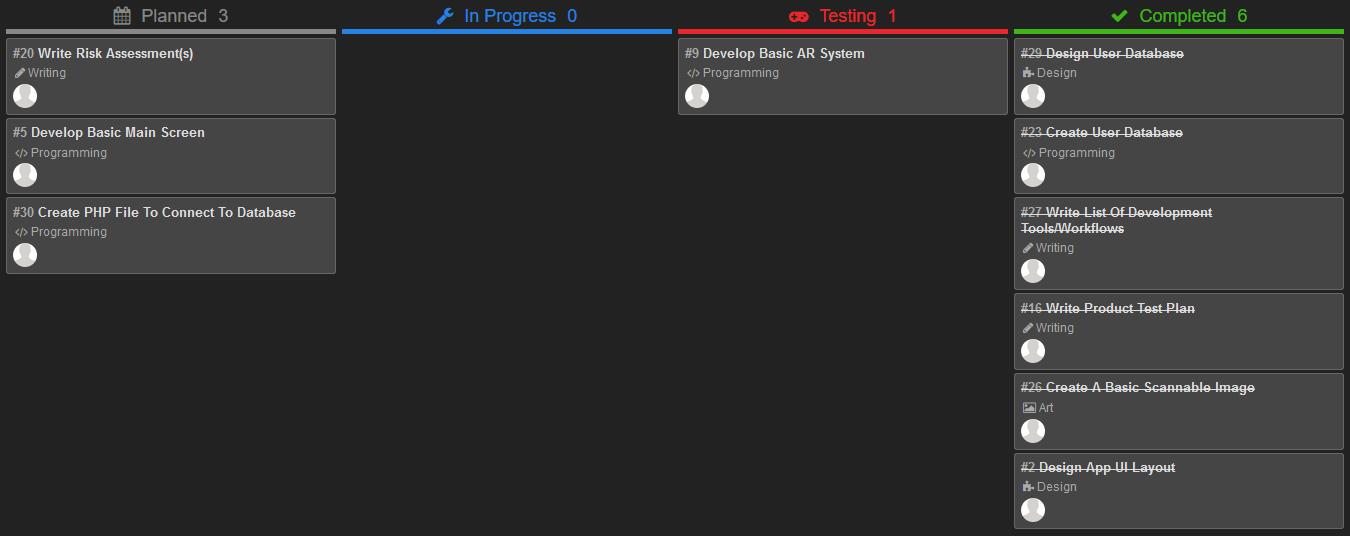


On Tuesday, Michaela was added to the repository, though she was unable to make any progress on the Unity project and there was no further communication from Alex and still no response from Abishek. As a result, John had to take on Michaela’s tasks in an attempt to get the AR system working.



**Sprint Review**

Below is the final board at the end of Sprint 1:



**WHAT BACKLOG ITEMS HAVE BEEN “DONE”?**

* Design user database.
* Create user database.
* Write list of development tools/workflows.
* Write product test plan.
* Create a basic scannable image.
* Design app UI layout.

**WHAT BACKLOG ITEMS HAVE NOT BEEN “DONE” AND WHY?**

* Develop basic AR system – Although a basic AR system has been created in the Unity project, with a test image and AR object, the group did not have the means to test it by the end of the Sprint.
* Write risk assessment(s) – No communication from Abishek.
* Develop basic main screen – Minimal communication from Alex.
* Create PHP file to connect to database – Michaela was unable to complete her tasks in the Sprint, so John had to reallocate the work to himself. At this point, there was not enough time to complete this task.

**WHAT TO DO NEXT?**

For the next Sprint, testing the current project will be important to determine whether or not it works and will/will not require fixing. To do this, it must be ensured that all members have the necessary tools to test and build the Unity project. Other actions will include catching up on incomplete tasks from this Sprint and working on new ones. However, the most vital objective for the end of Sprint 2 will be to demonstrate a working version of the final product.

**Sprint Retrospective**

The two primary issues with this Sprint in terms of people were a lack of communication for a majority of the time and certain members not carrying out their assigned tasks. As identified during the meeting on Wednesday, a common problem was working out how to implement the product and how to get started. Once this was established, some members had not joined the GitHub repository, nor installed the required software to work on the project.

In addition, when attempts were made in the final few days of the Sprint to facilitate communication amongst the group, some members gave minimal responses and one did not respond at all, showing no indication that they were working on their tasks, even though it was emphasised twice that members should inform the team if they had encountered issues or could not complete the work for any reason. This could have allowed for better action to be taken in response.