# Sprint retrospective

This sprint focused on creating a functional implementation of the requirements expressed by NCR Atleos for an ATM simulation. This simulation had three components, the first was an ATM UI application that was full screen and ran on windows using only mouse and touch screen as inputs. This UI was to simulate card entry and cash dispensing and had to connect to a transaction switch that authorised transactions. Two options were to be made available to the user; cash withdrawal and balance inquiry. The next component was the transaction switch which used an API that the ATM had to connect to and calls. The switch should allow transactions to be seen flowing through it and store these in a log file. The switch then had to route transactions to the network simulator and return a response form this network simulator to the calling ATM. The final component was the network simulator, which acted as a mock up network for testing, and providing automated transaction approval and response. Data that was to be passed from the ATM to the switch was a card number, expiry date, an ATM id, transaction ID, PIN number and a withdrawal amount.

Within the first sprint there were a number of things that went well. The first thing that went well was the team organisation, as all members of the agile team split into sub groups to tackle each area of the ATM simulation. This allowed us to make progress with every aspect of the simulation and also do testing throughout ensuring that we were making each component of the simulation compatible with each other. Another thing to note that went well was that a large portion of the sprint backlog was completed and was able to be shown to shareholders. There awas only three items needing reviewed in the network simulator and everything else was completed in alignment with definition of done. What also went well was that we had a very functional simulation of the simulation working by the time the sprint review came around, meaning we had something of value to show the shareholders.

One of the things that didn’t go so well was that the ATM screen and buttons were hard for the clients to be able to read, and some of the feedback also suggested that the actual ATM screen itself needed to be resized as it did not take up a large enough portion of the screen. Another aspect of the first sprint that didn’t go so well was the sprint retrospective. During the retrospective there was a disjointed structure and it often didn’t feel like members of the agile team were sure of when to speak and when not to speak. This lead to silences throughout the meeting and ultimately gave an impression that there was a lack of cohesion between the group.

In order to improve for the next sprint we first of all take into account feedback given from stakeholders to better guide the project in a direction that they will be happy with. Another thing we will work on for the second sprint is the flow of the sprint review as we want this to be the best reflection of the work we have done as a team and having an organised flow with no silences is the best way to do this. For the next sprint we will also regroup and create a new sprint backlog and product backlog in order to keep creating functional software to show clients.

Overall, the first sprint was successful in establishing the foundation for the ATM simulation, with key components such as the ATM UI, Transaction Switch, and Network Simulator being implemented and tested. The team's organization and division of work allowed for steady progress, and a significant portion of the sprint backlog was completed, ensuring that stakeholders had a functional prototype to review.

However, challenges such as UI readability issues and an unstructured sprint retrospective highlighted areas for improvement. Moving forward, the team will refine the ATM interface based on stakeholder feedback, enhance the structure of sprint reviews and retrospectives for better communication, and plan the next sprint backlog to continue developing functional and user-friendly software.

By addressing these areas, the next sprint aims to build upon the progress made while improving collaboration, presentation, and overall product quality.