Lab: Requirements Engineering

Your task in this lab is to

- Read below case study on Desmond Inc.
- Formulate use stories based on the possibilities presented in the case

As a reminder, a use story always has the format

As a <Persona>
I can <Ability>
So that <Outcome>

Desmond Inc., an industry leader in high capacity water pump development is redesigning their production chain. The chain consists of up to 50 different steps that are carried out manually, semi-automatic or automatic.
Previously the different parts where put in a plastic bin and a piece of paper was attached to each bin describing which steps had been carried out. Each action is encoded by a 5-digit action code (i.e. A-00004 starts the inner milling on the CNC machine). To start a new process the next code in the process needs to be input into the machine. This also meant that all automated processes had to be started by a human. Actions can take between 5 and 60 minutes. In between the different actions the floor employees usually retreat to a break room and miss the exact time the machine is finished.
When something went wrong with a machine, the machine would turn on a siren and the nearest employee would check what is wrong and call the responsible on-call engineer. Recently the machines where updated and now offer an API that allows the machine to (automatically) run a piece of code when they are starting, finished or an error has occurred. Furthermore, the API allows for machines to automatically start an action. Error detection on the machine is buggy so there is a 40% false alarm rate resulting in the fact that most on-call engineers don't want to always walk to the machine. Most of the false alarms can be diagnosed by looking at an image of the machine as a whole.

With the recent rise in Big Data the company owners would also like to leverage data and a bonus system to incentivize the employees to work more.

The new IT manager would like to automate both the production as well as the notification process. He has defined the following actors

- *Floor employees handling the different machines*
- *On-call engineers*
- *Floor managers determining bonuses and work load*