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## Project Details

Name: Speedway RFID Swimming Prototype  
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Date: 10th April 2020

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## Work Carried Out

Setting up the Octane SDK and environment to run the software to investigate how it connects to the Speedway Reader.

This was successful carried out using sample code provided by Impinj which created a connection to the reader.

An outline of a potential software application solution was looked at. This would comprise of 3 sections.

- 1) A *Standalone Java Application* that would retrieve data from the reader, process it and then store it remotely in the cloud
- 2) A *Cloud Based Application* that would be able to apply logic to the data it receives to create meaningful data for a MVP application
- 3) A *Single Page Application* which would be a webpage that would allow remote access to the data in the cloud that could be viewed while the Speedway Reader is operating or at any point afterwards to review the data.

The range of technologies involved in this MVP application will consist of *Java*, *SpringBoot*, *MySQL*, *AWS*, *RabbitMQ* and *AngularJS/HTML*.

A *Microservices* software design approach will be taken with respect to the application running in the cloud. This will allow for much greater flexibility by decoupling services which ultimately can be plugged in and out at a later point for further development. It will also allow for a various range of technologies to be used outside of Java should it be required and lead to better longer term development operational maintenance.

An estimation of 10 working days is being given for this to allow some “slippage” space incase of any unexpected issues during development.

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## Known Blockers

Currently none

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## Next Steps

Designing the MVP in more detail along with starting development of the standalone Java application to acquire data from the reader.