

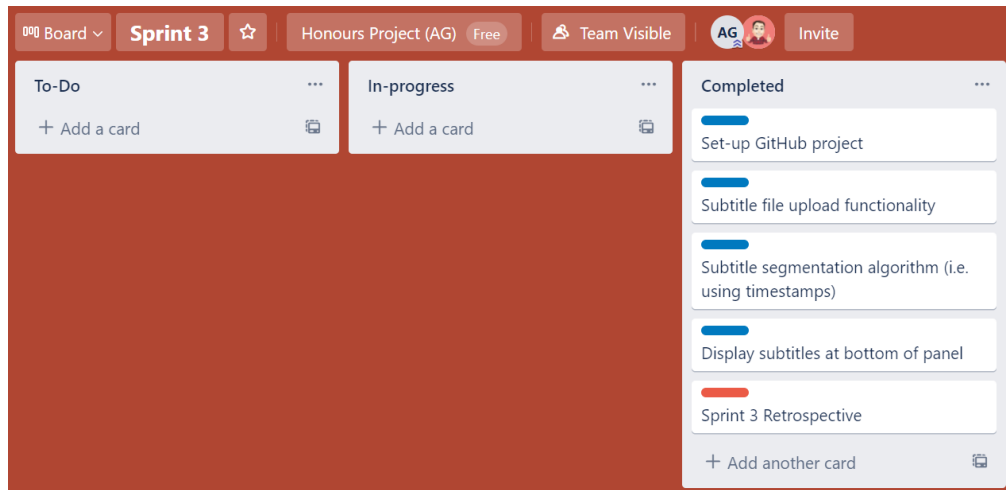
# Sprint 3 Retrospective

**Start Date:** 15<sup>th</sup> of February 2021

**End Date:** 21<sup>st</sup> of February 2021

**Duration:** 7 days

**Goals:** The main objective of this sprint was to add captions to the extracted video keyframes. Exploring timestamps both within FFmpeg keyframes and .srt files was a research area for this sprint. A focus of this week was also to improve workflow by setting up a GitHub project.



## Decisions:

### *Web Assembly*

Web Assembly allows developers to write applications for the web in languages other than JavaScript with no installation and near-native performance. In December 2019 Web Assembly became an official W3C standard [3]. Using Web Assembly alongside FFmpeg, through the FFmpeg.wasm binary, allows for conversion of video to graphic novel entirely inside the browser.

## Outcomes:

A GitHub repository was set up in this sprint to better keep track of changes. This was used alongside GitKraken to visualise progress and improve coding practices. A sample subtitle file was created manually for testing purposes. The subtitle file was loaded using the FFmpeg FileStream and parsed with index, timestamp and text being recorded. Each section of subtitle text was added to each keyframe panel consecutively. It was displayed at the bottom of each panel as white text on a translucent banner. The subtitle panel assigning method will need to be improved and will be explored alongside the improvement of the keyframe extraction model in the next sprint.