## **Project Methodology**

# Agile

Within the Agile methodology, change is expected. As individual sprints are only measured in weeks, there is significantly more flexibility available if the client needs /desires change throughout the project. It also allows for more accurate representations of what a client wants in their project, as they have constant say in how it is developed, iteration by iteration (Kumar & Bhatia, 2012)

### Scrum

Scrum is a methodology that implements the framework laid down by Agile. It works by dividing the work required into a series of sprints, and communication is maintained through the sprints using daily stand-up meetings. Change is expected and encouraged but is restricted to only occur generally between sprints. Completing work in sprints allows for constant feedback on the iterating product.

#### Kanban

Kanban is a popular framework used to implement agile and DevOps software development. It requires real-time communication of capacity and full transparency of work. Each work items are visually posted on the Kanban Board. This methodology focuses on a "just in time" approach and is much more focused around change at any time, rather than Scrum's more fixed focus on changes only occurring between sprints. Defined roles are also not a requirement in Kanban, unlike Scrum

Method being employed: Scurm-ban (Scrum/Kanban mix)

### Reasoning

We are considering Scrum-ban, a methodology that is a hybrid msix of Scrum and Kanban. The mix we will use is closer to Scrum but uses a few key elements from Kanban. We are planning this because the development team is more familiar with Scrum but is also interested in employing a few methodology characteristics from Kanban as the client has used them with previous teams and had good levels of success.

Once development starts, a typical scrum setup on Trello will be followed, with sprints, a product backlog, stand-up meetings, and other standard Scrum features. Our Trello board differs slightly from traditional Scrum though, as it has more columns than a Scrum board would typically have, encompassing the traditional Scrum columns of "Product Backlog", "Sprint Backlog", "In Development" and "Development Complete", but including "Sprint UAT", "Leeanna UAT" and "Merged and Completed". This allows for more meaningful, granular progress to be displayed on individual cards as well as giving them the freedom to move around the board's columns as required

As for communication and team interaction, elements from both Scrum and Kanban will be employed. Regular status update meetings will occur, but not at the frequency and in the same format as Scrum does (i.e., daily stand-up meetings), as these will only be held when the team feels it is necessary. Any changes that are made will be added to the bottom of the Product Backlog, and if we are able to get to them within the time and scope of the project will be addressed when required

Team roles are another area where the team is following the Kanban in Scrumban. Here, the development team are choosing to not follow any formal role assignments (i.e., Scrum Masters, Developers, Product Owners), and instead are all taking an equal role in keeping each other on track, unless the need for defined roles becomes apparent later, in which case the topic can be revisited when required