Methodology

There are various strategies for software development, the main two being the traditional ‘waterfall’ method and an ‘agile’ approach to development strategies.

Given that the online ticketing app is a reasonably simple system in its design and implementation and will need to be improved with changing user requirements, it was decided that a partial implementation of agile approach methodology would be best. This is due to agile approach focusing namely on iterative development and reducing chances of large costs that may incur if change was made later in the development in a waterfall model. Agile is responsive to change in customer requirements and allows for return to previous stages throughout the development process (McCormick, 2012). Agile is well suited for small groups and the development team for this project consists of less than 5 members.

The traditional waterfall methodology follows a ‘one phase’ and ‘set-in-stone’ approach which means that once decisions have been made in the initial stage, there is no turning back or else the organisation will incur high costs to do so (McCormick, 2012). This approach requires the team to spend a considerable amount on each stage before moving on and that bugs are corrected in advance. Meanwhile, in agile methodologies, less focus is given to documentation and more is given to ensuring the deliverability of working software. (Somerville, 2016). The stakeholders are provided demonstrations of the program at the end of each iteration and their feedback and response is used and implemented for changes in the following iteration. This process is repeated/iterative cycle continues till the product delivered meets user/customer expectations. It was found that agile to be more efficient than waterfall due to its adaptability to the real world. It is easier to make last minute amendments to the requirements or design (McCormick, 2012).

The project will not be fully agile, however, only the software will be based on agile prototyping to revisit the user base but once the requirements are fixed, the rest of the project will be completed following the waterfall method as it is unlikely that there will be any changes for rest of the project.

Bilbio:

Sommerville, I., 2016. *Software Engineering*. 10th ed. Old Tappan: Pearson Education UK.