## 1 Project Management

## 1.1 Development Methodology

The project will take a sequential approach to the development process utilizing the waterfall model whose origins come from the seven stages of development conceived by ?. The Waterfall model will ensure the project traverses through the software development lifecycle sequentially however as a contingency measure the model will be practised with feedback loops to "go backwards in the software development lifecycle" if the project requires it. The waterfall model which is suited to milestone-driven development will complement the project's timescale (see Figure 1.1) and encourage the project to be structurally well designed before proceeding onto implementation phase of the development.

## 1.2 Risk Analysis

Throughout the project there some risks which the development and progress of the project can be susceptible to. These risks should be dealt with correctly, and therefore a risk analysis plan has been documented as part of the planning within the project, Table 1.1 documents the main risks for which the project must plan against.

## 1.3 Progress

To ensure the project progresses and the system is delivered in full (all the identified requirements satisfied) the project milestones have been planned meticulously against the time available from inception to the completion of the project. Within the project timescale; weekly meetings with the project supervisor will occur to verify the project execution is on track and correct. An overview of the intended project timescale is covered within Figure 1.1.

Risk	Likelihood	Effect	Strategy Type	Strategy Actions
Insufficient	Highly likely	Progress is halted until	Avoidance	Where possible avoid
resources		resources available.		resource intensive approaches
available				i.e. complex infrastructure.
				Explore all possible
				approaches to resource
				intensive problems to ensure
				the most efficient approach
				for the available resources is
				chosen.
Complexity of	Fairly likely	Slow down progress	Minimisation	Avoid going too in-depth
Technology				within complexities of
				technologies
				Read technology
				documentation where
				progress has slowed
Inadequate	Unlikely	Reduce time available for	Contingency Plan	Readjust project timescale to
estimation of		remaining tasks		ensure milestones have
project timing				sufficient time to be met
Incorrect system	Unlikely	Progress is halted until	Contingency Plan	Reformulate requirements to
requirements		requirements are corrected		ensure they are reflective of
				new observations.
Requirements	Unlikely	The Quantitative amount of	Minimisation	Ensure the scope of each task
Inflation		work required has increased		is well defined

Table 1.1: Project Risk Analysis Plan



Figure 1.1: Gantt chart of project life cycle.