A brief description of the approach taken: technical (choice of language, tools, type of diagram) and modelling (how you chose the abstractions, design patterns etc.) - max 2 sides A4

# Approach Taken

## Technical

The project specification has required us to work in the Java programming language; this works out well as we have all had experience working with Java and are familiar with it.

We have chosen to use Eclipse as our integrated development environment, this is because we have all had experience using it before and the majority voted for the use of Eclipse as their preferred IDE over anything else.

We will use Microsoft Word 2010 to produce the documentation for the project.

We will use Google Docs to circulate agendas before meetings.

We will use Forge for our project repository, each member of the group has used it before so we are familiar and it allows us to easily share the work we have made on our tasks.

We will use Microsoft Excel 2010 to produce a time expenditure report that will be updated by each individual member of the group, but will be monitored by Kelvin to check that everyone is keeping on tract with their allocated work.

We will use [www.smartsheet.com](http://www.smartsheet.com) to produce a Gantt chart and keep it updated; Edward found this piece of software to be good at producing Gantt Charts. It will allow us to monitor if we are at the right stage of the project and what tasks need to be completed next. Keeping it updated will allow us to have a middle Gantt chart and a final Gantt chart to show how the work breakdown changed over the course of the project.

The types of diagram we have chosen to include for our design of the software are, Use Case diagrams to identify all of the use cases from the requirements, class diagrams, so we have a way to break the software into smaller classes that can be coded and sequence diagrams to see how these classes are meant to interact within the system. There will also be wireframes so that we can design the UI of the system to be implemented in the later stages of development.

## Modelling

In the project specification one of the requirements it to structure the code using the Model-View-Controller architecture, so our design process will start with the architecture and move on down to the individual components and build up from that.