**Specification and Design Report**

**Version 16**

*The report must be submitted using the following form and should not exceed 6 to 12 pages in length!* *The file format to be used for submission is Microsoft WORD. Please do not submit a PDF file as it does not lend itself to easy insertions of comment, if needed.*

*Please do not change the format of this form. Use it as it is! All fields are a must and should be filled in.*

**Student's Name:**

**Student's Number:**

**Student's Email Address:***The email address should be exactly the same that is used in communicating in the Laureate's email system (Firstname.Lastname@online.liverpool.ac.uk).*

**Project Title:** *(Your title should tell the reader the key objective of the research)*

**DA Class ID:** (*A full and accurate number is a must! This will now include a DA reference number with the format H000XXXXX*)

**Name of DA:**

**Name of GDI:**

**Name of SSM:**

1. **The Specification**

**Project Context, Aims, Objectives, Ethical Considerations and Outcomes**

*This section should be a set of detailed descriptions of what the project is about. This includes an explanation of the research study and its purpose and incorporate the following sub-headings:*

***The Context of the Research****: Describe the context in which the research will be conducted, including attributes or characteristics that will inform the research approach. Also include a summary of the research and analysis carried out thus far that led to the choice of the research.*

***The Problem Statement****: Highlight its relationship to the context, including how the context informs the problem statement.*

***The Dissertation Question(s)*** *These are the questions that will guide your research*

***Ethical Implications:*** *Describe any requirements for Ethical approval, including a description of the participants and where, within the research, they will be used.*

***The Anticipated Outcomes:*** *How will the research lead to outcomes that demonstrate scholarship that adds to the body of knowledge*

*Include a detailed description of the IT artefact that will be produced as a result of research, how it supports the anticipated outcomes and how the IT artefact will be evaluated, and with what approach*

***Major Modifications:*** *If needed, include a description of any major modifications made since the original proposal. The original proposal is included as an Appendix in the final Dissertation paper. Any deviations from the proposal must be acknowledged in the Specification & Design Report*

**Literature Survey:**

*This should expand upon what was presented in the proposal, include at least 10 authoritative sources and should discuss existing knowledge in the field and the prior knowledge upon which the project is based. While it does not have to be as detailed as the literature survey in the final dissertation report, each identified source should be accompanied by a short, 200 word, annotated bibliographic entry. The goal of the literature survey is to provide evidence than an initial review of the literature about the research topic has been completed.*

***Conduct of the Project****:*

*Propose how the project will be carried out and should include, where appropriate:*

* *Background on the research*
* *What information will be used to understand the problem and its solution*
* *What research methods will be used to inform the development of an IT artefact*
* *Data required: what data will be needed for the project and from where it will be obtained;*
* *Any new skills that will be required and how these will be acquired;*
* *The software to be used*

1. **The Design**

*Outline of the project design, according to a standard method. The designs will vary according to the type of project and the dissertation question(s) being posed.*

*A typical design of a software implementation would include:*

* *A description of the way the production of the system (the IT artefact) is linked to the testing of the dissertation question(s)*
* *A description of how the IT artefact will be evaluated in order to test the dissertation question(s).*
* *A description of the anticipated components of the system and how they are to be organized;*
* *In case there is a need for a commissioned work (such as a hardware device or a service routine) it must be specified in this report and justified, otherwise it could be treated as collusion;*
* *A description of data structures to be used by the system;*
* *Models, such as case diagrams; an interaction chart; the objects to be used in the system; attributes and methods of objects; pseudo-code for the key methods;*
* *Algorithms to manipulate these data structures; and*
* *A design of the intended interface*

*For a quantitative project involving the empirical investigation of some hypothesis one would normally expect to see things such as: a statement of the hypotheses to be tested; a description of the test data to be used; an experiment design, the experiments to be performed; any controls to be used; a description of how the results will be analysed, including any statistical techniques that will be used; details of how the investigation informs the creation of some IT artefact; anticipated conclusions; program designs for any software that needs to be developed to generate the test data or conduct the experiments.*

*A project that will produce a framework must include the following:*

* *Participant backgrounds*
* *Survey/Interview questions for gathering of information*
* *Categories to be incorporated within the framework, with detailed explanations on how the survey/interview questions will provide what is needed to inform the development of the framework*
* *The approach for analysis of data gathered*
* *A initial prototype of the framework interface or guidelines structure*
* *Identification of where and how the framework or guidelines will be implemented for purposes of verification of appropriateness*

*The Design section of the report must clearly show that a design method has been followed in the use of research methods and in the creation of an IT artefact, and that the design has been carried out with sufficient attention to detail as to inspire confidence that it can be implemented, tested, and evaluated in the time remaining for the project.*

*The Design should also show how the IT artefact is to be evaluated in the light of the original dissertation question(s)*

1. **Statement of Deliverables**

*This states what will be produced by the project. It serves as a development of the Deliverables section in the proposal. In some cases it may be useful to identify some deliverables as essential and others as desirable. As appropriate, this may include* ***some or all*** *of the following items produced by the research*

* *Research designs (e.g. software or survey designs)*
* *Software incorporated in the design or as a result of the design*
* *Survey/Interview Research results*
* *A statistical analysis of data gathered either before or after the design*
* *The IT artefact*
* *Evaluation designs and results*
* *Documentation*
* *A report containing conclusions and recommendations*

1. **Project Plan**

*A timetable of project activities and outputs. This should include internal milestones as well as external assessments and reviews. The plan should state both the progress achieved up to the date the plan is written as well as future activities. A Gannt chart would be appropriate for this section.*