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|  | Faculty of Digital TechnologiesHot Topic  Quarter 2 2019 |

# Project Proposal

**Due** : Presentation (1)- check course descriptor and canvas.

**Mark** : Contributes 30% towards the final mark for your course.

Refer to the marking schedule attached.

## Required:

Using your own words, complete the tasks listed below.

#### Report Structure:

Use Microsoft Word to write your report. Your report must include the following features:

* 1.5 line spacing
* 3cm left and right margins
* Formatted as for a business report, i.e. A title page, table of contents, footers with page numbering, etc

#### Handing in Instructions:

Submit on Canvas. Your assignment must include a signed copy of the Assignment Cover Sheet.

**Grades Breakdown**

|  |  |  |
| --- | --- | --- |
|  | **Possible** | **Actual** |
| Total for Research Proposals | 30 |  |
| Total for Proposal Presentation | 10 |  |
| Total entered into SMS | 40 |  |

## Tasks

The aim of this project is to identify a problem, an issue or an opportunity that can be solved or enhanced using a software technology. There have been sample of specific research problems highlighted in the class in week 1, and a list suggested on Canvas. The identified problem should be dealt with using automation specifically by building a working prototype using any high level programming or scripting languages. Open source reengineering ideas are welcome but must have a narrow scope. This assignment is not purely research rather the problem identified can be related to real world applications associated with business, ecommerce, management, research problem (although it must be small and narrow in scope), health or social dilemma, algorithmic problem in IT (software engineering, networking, machine learning, Artificial Intelligence, etc.). The expected deliverable of the project is a technical proposal (week 4) that in turn will have a practical implementation (week 7) and then a final report combining both components in week 8. There is also a proposal presentations in week 4, and a prototype demonstration in week 8 (details on the second component can be found in the course webpage at Canvas).

1. Prepare a technical/research proposal explaining your software problem, scope, any question(s), resources needed, potential software methodology/solution/model followed, stakeholders involved, timeline and your overall plan (Gantt chart) to answer these. Use the structure of a Research Proposal outlined in class and published at Canvas.
2. Prepare and deliver an oral presentation outlining your proposal. Introduce your idea/problem(s)/issue (s), why it is important to automate it? The existing theories/solutions associated with the topic, and the rationale for your specific scope and questions

* Note: Once you build the prototype your initial proposal will be revised to include design and implementation and therefore a final report will be due in week 8 along with live demonstration

Your presentation needs to be:

* length 10-13 minutes, with 3 minutes for questions
* supplemented with appropriate visual aids
* if you use PowerPoint, then please provide a set of three-slides per page handouts

A clear software methodology based on project management body of knowledge should be followed in developing your proposal especially on how you will go about design, analysis and implementation and what quality assurance measures are adopted.

You should be prepared to answer questions on your presentation.

1. You must attend all presentations. You will be expected to give feedback on other students’ presentations.

### Proposal Presentation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Criterion** | **Possible** | **Actual** |
|  |  | Voice |  |  |
|  | 1 | Clear, loud enough, and can be understood | 10 |  |
|  | 2 | Shows interest | 5 |  |
|  |  | Content |  |  |
|  | 1 | Material is organised and logically ordered | 5 |  |
|  | 2 | Ideas are clear | 5 |  |
|  | 3 | Presentation is interesting and has impact | 10 |  |
|  | 4 | Research topic is effectively introduced; research questions are placed in context. | 25 |  |
|  | 5 | Technical terms are explained fully, presentation is adapted to audience | 5 |  |
|  |  | Nonverbal aspects |  |  |
|  | 1 | Delivered with poise, conviction, eye contact, appropriate gestures, enthusiasm | 10 |  |
|  | 2 | Effective presentation aids | 5 |  |
|  | 3 | Notes/cues are used appropriately or are not needed | 5 |  |
|  | 4 | Handled questions with confidence and honesty | 5 |  |
|  | 5 | Timing is managed well (12-13 minutes speaking, 3 minutes questions) | 5 |  |
|  |  |  |  |  |
|  |  | Participation |  |  |
|  | 1 | Arrived on time and attended all presentations | 5 |  |
|  |  |  |  |  |
|  |  | Total for Presentation | 100 |  |
|  |  | Total for Presentation \*0.10 carried forward | 10 |  |