

INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

**Heart Disease Prediction System**

A Project Proposal by

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Submitted in partial fulfilment of the requirements for the BEng (Hons) Software Engineering degree at the University of Westminster.

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**List of Abbreviations**

# Introduction

This is an introduction to your entire project. Just one paragraph

# Problem Domain

This is the place where you convince the reader why this research must be carried out, the significance of the research, magnitude of the problem, etc…

1 and ½ page the maximum

# Problem Definition

Explain the problem using ½ to 2/3 of the page

## Problem Statement

Problem in nutshell just one sentence

# Research Motivation

What motivates you to do this research. This more a personal statement

# Existing work

You will be adding the most important 5 to 10 research in summarized form presented in a tabular form from which you are deriving the research gap. The limitations presented in this should be relevant to your research gap

|  |  |  |  |
| --- | --- | --- | --- |
| Citation | Brief Description | Limitations | Contribution |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Research Gap

The research gap that you will be addressing in your research.

Expectation versus actual

There are different type research gaps

1. Theoretical gap
2. **Performance gap**
3. Empirical gap

# Contribution to the Body of Knowledge

By addressing the above gap what is the contribution you are going to make

## Technological contribution

## Domain contribution

# Research Challenge

Evidence for complexity and challenge to achieve, you need to write such that it gives reason why it could lead to a publication.

Publishable doesn’t mean it is publishable in a conference but publishable in a <https://mjl.clarivate.com/search-results> journal

Further evidence to show that this can be further extended to PhD research

# Research question/s

https://www.scribbr.com/research-process/research-questions/

# Research Aim

One sentence

Further elaborate on the aim

# Research Objectives

Elaborate the steps of atomic activities that you need to carryout to achieve the aim

|  |  |  |
| --- | --- | --- |
| Research Objectives | Explanation | Learning Outcome |
| Problem Identification |  | LO1 |
| Literature Review | RO1  RO2  RO3 | LO1 |
| Data Gathering and Analysis |  | LO2, LO3 |
| Research Design |  |  |
| Implementation |  |  |
| Testing and Evaluation |  |  |
|  |  |  |
|  |  |  |

# Project Scope

## In-scope

## Out-scope

## Diagram showing prototype feature

# Methodology

## Research methodology

|  |  |
| --- | --- |
| Research Philosophy | The author of the research has selected the positivism as the research philosophy |
| Research Approach | Deductive or inductive why? |
| Research Strategy | Experiment, survey => questionnaire (can be quantitative or qualitative) or interview (can be quantitative or qualitative), |
| Research Choice | Mono method => only one method can quantitative (Positivist) or qualitative (interpretivist), Multi method (More than one method but all belong to same paradigm (positivist or interpretivist)) or Mixed method (only pragmatist can mix the method => mixing the method from positivism and interpretivism) |
| Time zone | Cross-sectional or longitudinal |
|  |  |
|  |  |
|  |  |

## Development methodology

### Life cycle model

### Design Methodology

### Evaluation Methodology

### Benchmarking

* 1. **What is the life cycle model and why?**
  2. **Design methodology => SSADM or OOAD or Anything else?**
  3. **Evaluation methodology => Evaluation metrics and/or benchmarking**

## Project management methodology

### Schedule

### Gantt Chart

### Deliverables

### Resource Requirements

### Software Requirements

### Hardware Requirements

### Data Requirements

### Skill Requirements

### Risk Management

* 1. **Schedule using the Gantt Chart after doing a WBS (Do not have to provide the WBS)**
  2. **Deliverables, milestones and dates of deliverables**
  3. **Resource requirements** 
     1. **Hardware requirements**
     2. **Software requirements**
     3. **Skills requirements**
     4. **Data Requirements**
  4. **Risk Management**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk Item** | **Severity** | **Frequency** | **Mitigation Plan** |
|  | **5** | **5** |  |
|  | **5** | **4** |  |
|  | **5** | **1** |  |
|  |  |  |  |

# References

Structure of the report for ASE and FYP Students and CSF Students who will involve in development project

Introduction

Literature Review

Methodology

Requirement Elicitation and analysis

SLEP Framework

Design

Implementation

Testing

Evaluation

Conclusion

Structure of the report for CSF Students for students doing Conceptual Framework Research

Introduction

Literature Review

Methodology

Data Gathering and Analysis

SLEP Framework

Conceptual Framework Design

Evaluation

Conclusion