Project Proposal (Maximum 20 Pages)

**Declaration Page**

**1.1 Introduction**

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

**1.2 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

**1.3 Problem Definition**

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

**1.3.1 Problem Statement**

Problem in nutshell just one sentence

**1.4 Research Motivation**

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

**1.5 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

**1.6 Research Gap**

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

There are different type research gaps,

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

**1.7 Contribution to the Body of Knowledge**

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

1. Technological contribution
2. Domain contribution

**1.8 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

**1.9 Research question/s**

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

**1.10 Research Aim**

One sentence

Further elaborate on the aim

**1.11 Research Objective**

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 |  |  |
|  |  |  |
|  |  |  |

**1.12 Project Scope**

1. **In-scope**
2. **Out-scope**
3. **Diagram showing prototype feature**
   1. **Methodology**
4. **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 |
|  |  |
|  |  |
|  |  |

1. **Development methodology**
   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**
2. **Project management methodology**
   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** |  |
|  |  |  |  |

**Reference**

Harvard style referencing should be followed.