**1. Introduction**

The Spam Filter uses a deep learning algorithm for checking a set of text or single text for spam or ham. It is commonly used in Email services, Chatbots, Social Media to connect with same view people.

**2. Estimations**

Cost estimation: Not done since we have NIL budget

Duration estimation: Not done since duration is fixed (~1 month)

Size estimation: at most 600 lines of code (including source code, tests, everything)

Effort estimation

**COCOMO-I**

- Used organic project parameters: a = 2.4, b = 1.05

- Effort = 2.4 \* (KDSI)^1.05 PM = 2.4 \* (0.6)^1.05 PM = **1.16** **PM**

- We estimated around 500 lines of code including all source code, testing code, extra tooling. This is a reasonable assumption as Python is a very high-level language.

- REUSABLE component = 25% approx

**3. Schedule**

- Work breakdown:

- T1: Create project plan, feasibility analysis, choose a lifecycle model, SRS creation

- T2: Creating design document

- T3: Drawing diagrams (use case diagrams etc)

- T4: Coding/Implementation

- T5: Testing

- T6: Last minute improvements

**4. CPM:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Task | ES | EF | LS | LF | ST | Dependency |
| T1 | 28 Sept | 30 Sept | 29 Sept | 2 Oct | 3 Days |  |
| T2 | 30 Sept | 3 Oct | 3 Oct | 4 Oct | 1 Day | T1 |
| T3 | 3 Oct | 5 Oct | 4 Oct | 6 Oct | 1 Day | T1, T2 |
| T4 | 5 Oct | 13 Oct | 6 Oct | 15 Oct | 3 Days | T3 |
| T5 | 13 Oct | 15 Oct | 15 Oct | 16 Oct | 1 Day | T4 |
| T6 | 15 Oct | 16 Oct | 16 Oct | 16 Oct | 0 Day | T5 |

**5. Risk management plan**

1. Risk identification

i. **(R1)** Schedule related risks: Given other commitments, the satisfactory completion of the project according to the schedule is risky.

ii. **(R2)** Technical risk: Given that we have decided on waterfall model, once design document is ready, we can’t go back. So care is needed there.

2. Risk assessment

a. We classify both risks as having **HIGH** severity

**i.** **R1** may lead to incomplete project submission

**ii.** **R2** may lead to poor design and breaking the lifecycle model chosen

3. Risk mitigation

**a.** **R1**

i. As transfer of risk is not possible In both these risks, We try hard to stick to the schedule created above. Slack time is also given, implying our calendars need to be tweaked accordingly

**b.** **R2**

i. mitigation possible for R2 in our approach but is very difficult. We have to stick to the chosen life cycle model and work carefully to avoid this risk .