 Air University Multan campus

Department of Computer Science and Engineening

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Pocket Flight Logger & Planner

**Project Proposal**

Prepared by

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**Revision Table**

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# Introduction

Our goal is to provide easy-to-use, responsive web application that allows commercial pilots to log their flights and devise flight plans with the help of aeronautical charts and weather reports.

**Context:**

The project is designed specifically for commercial pilots which will terminate the traditional procedures of expecting/filing a flight plan.

**Problem:**

Usually, airline or cargo pilots are compelled to carry airfield charts of the origin and destination airports including their own flight logbook and weather reports in hard copy. These three documents when combined, forms almost half the size of an algebra book.

**Response:**

Our project, therefore, will provide a platform whereby pilots can maintain their log and expect their routes in accordance with the updated weather reports. This will eventually be proved as a timesaving and space-saving tool as it will remove the fatigue of taking care of the documents.

# The Problem

Why can’t we eliminate the unnecessary handling of hard copies despite living in the era of modern technology?

# Project Goals and Objectives

As stated above, the primary goal of this web application is to facilitate airline pilots with its responsive nature so that they can have a view of the relevant information.

The project shall also somehow promise paper usage reduction which results in saving hundreds of trees. Moreover, pilots can enjoy advantage of logbook and aerodrome charts on their mobile phone screen.

Since many aircraft models are not equipped with modern technologies such as weather radar, ILS information displayer or electronic flight bags. This application shall overcome these restrictions as it allows aeronautical chart viewing, log maintenance and weather report viewing.

# The Solution

The strategy is to overcome the challenge by developing a web application using django framework. This framework will allow administrator to store all airport charts.

From pilots’ module, after logging in, when they file a flight plan, enter origin and destination, the weather reports (METAR) and airport charts of origin and destination appear. Further, this module will also enable them to view their logbook and total flight hours.

# Project Scope

Since the project is intended to be built for commercial and private pilots, it will have a significant impact on the aviation industry as there is still lot of paperwork today. We believe that our project will be appreciated once introduced to the pilots’ own hand-held devices.

# Hardware and Software Tools

## 6.1.Hardware

Dell 4th generation machine

Core i7 intel technology

512 mb Nvidia graphics card

250 Gb Hard disk

8 Gb RAM

## 6.2.Software

Django using react and rest framework

# Cost (if applicable)

The report should include any costs related to hardware or software requirements for the project. Examples include hosting services, special hardware devices, software applications, etc. If there are any costs involved in a project, at least three proposals should be included in the appendix. This is vital information for the committee to make decisions.

**REST of the template is to be filled gradually**

# Timeline

You should explain here your principal tasks, their duration, and their sequence. Wherever possible, the methods and task to be performed should be outlined in logical sequence and explained in detail. A common way of identifying project milestones and due dates is to use a graphic representation of the task relationships, such as a Gantt Chart.

Here is sample Gantt chart

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Task | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr |
| Do the Literature Survey |  |  |  |  |  |  |  |  |  |  |
| Analyze Social Networks |  |  |  |  |  |  |  |  |  |  |
| Design Data Crawling Techniques |  |  |  |  |  |  |  |  |  |  |
| Design the database |  |  |  |  |  |  |  |  |  |  |
| Design data mining algorithms |  |  |  |  |  |  |  |  |  |  |
| Design the user interface |  |  |  |  |  |  |  |  |  |  |
| Develop the Data Crawler |  |  |  |  |  |  |  |  |  |  |
| Build the database |  |  |  |  |  |  |  |  |  |  |
| Develop the data mining algorithms |  |  |  |  |  |  |  |  |  |  |
| Build the user interface |  |  |  |  |  |  |  |  |  |  |
| Test the Web Crawler |  |  |  |  |  |  |  |  |  |  |
| Test the Database |  |  |  |  |  |  |  |  |  |  |
| Test the Data Mining Algorithms |  |  |  |  |  |  |  |  |  |  |
| Test the User Interface |  |  |  |  |  |  |  |  |  |  |
| Perform Integration Testing |  |  |  |  |  |  |  |  |  |  |
| Write the Proposal |  |  |  |  |  |  |  |  |  |  |
| Write the Progress Report |  |  |  |  |  |  |  |  |  |  |
| Write the Final Report |  |  |  |  |  |  |  |  |  |  |
| Prepare for the Presentation |  |  |  |  |  |  |  |  |  |  |
| Design the Project Poster |  |  |  |  |  |  |  |  |  |  |

This is only sample you have to divide your tasks accordingly and then set milestones.

## 8.1.Activity Network

## 8.2.Bar Chart

# Roles and Responsibilities

Roles and responsibilities of project members should be clearly stated in the beginning of the project.

The following table can be used as a template:

|  |  |  |
| --- | --- | --- |
| **Role** | **Responsibilities** | **Participant(s)** |
| Project Leader |  |  |
| Analysis |  |  |
| Design |  |  |
| Implementation |  |  |
| Testing |  |  |
| Domain Experts |  |  |

# Risk Management

Under this section, you should identify all the expected risk (minimum five risks), the likelihood that the risk will occur and your strategy in avoiding, minimizing or dealing with each risk if occurred.

The following table can be used as a template:

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Type** | **Probability** | **Strategy** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# References

Always give complete citations for material on other sources. A proper reference involves two components: the citation in the text and the complete bibliographic entry in the References section. Use the Institute of Electrical and Electronics Engineers (IEEE) style for referencing. For more information see

<http://wwwlib.murdoch.edu.au/find/citation/ieee.html>

[1] Booch, W, Colomb, G., Williams, J. 1995. The Craft of Research. The University of Chicago Press, Chicago, USA.

[2] Mochal, T., “Project Goals and Objectives”, 2008. [Online]. Available: <http://www.kidasa.com/information/articles/goals/index.html> . Accessed [October 2009].

# Appendices

An appendix is included at the end of the proposal. It contains information referred to in the proposal that's too large to fit in the body of the proposal. Provide any appendices you have in this section.

Appendices include the material needed for the report but which is unnecessary to include in the text itself (sample agreement form with client, graphs, and interview forms). The appendices must be referred to in the text and they must have all the necessary information needed for interpretation. Appendices are situated at the end of the thesis and numbered consecutively. The written form for reference to appendices within the text is: Appendix 1, Appendix 2, etc. In the References it is: APPENDIX 1, APPENDIX 2, etc.