CONCEPT PROPOSAL

For

Ser 515 - SOFTWARE ENTERPRISE: INCEPTION & ELABORATION PROJECT

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Preface

This document proposes a new idea that tackles a problem or suffice the needs of a user. It will help a set of jury members to discuss on the advantages and disadvantages of this new idea based on the key factors highlighted in this document. With the help of this document, application functionalities, capabilities and other aspects could be assessed. It will help in quick evaluation and feedbacks and further enhancements.

Revision History

Date	Revision	Description	Author
11/26/16	1.0	Initial Version	Abhishek Dutta

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1. Introduction

1.1 Title

The title of this application is "***Expense Tracker***". The name has been derived from the fact that this application will help to store the expenses of a user and will help to track it in future.

1.2 Overview

Expense Tracker basically is maintaining the user expense information with details as such category, date of entry and the amount spent on the category. A user can go back and update an existing entry or delete an existing entry. Users can also add/delete different members or check other user's expenses. The application takes input using command line console and accepts only a valid entry for an existing user.

The project is mainly designed for the use of students, who want to track their monthly expenses or a family person who wants to keep track of the expenses made by the family members. It can be also useful to a small group of people or a small organization/association who wants to track their expenses made from a common fund. The user interface is a simple command line interface and all the options are clear to understand for a person. The programming language used for building this application is Java and data is stored using Json.

2. Background

There are often instances when a student is staying away from his home and must control his/her expenses. This application will help the student to keep track of his budgets in the past and plan his expenses accordingly in the future. Not only student, but it can be also used by a family person who wants to keep track of expenses his family members make and plan the family budget accordingly.

3. Objectives

The main objective of this application is to solve common budget problem for a user by maintaining regular data about expenses and showing it to user whenever they need it to refer. It's a small but very useful application for a common man. Using this application, user can eliminate their small problems. The goal of this project is to maintain simplicity and automate few of the data by storing it in a temporary usage as per user convenience. This application can be further enhanced to a great level by adding functionalities and increasing its capabilities.

One such example could be to set the limit of a daily/monthly expense and as soon as the budget exceeds it, it should notify users about it. Also, it can be implemented as a mobile app so that user can maintain everything in their phone memory itself.

4. Implementation

This application will be implemented using Java programming language keeping in mind that it can run in any environment. Also, JSON framework is used to store the data in file as it is efficient way to read/write data in file system. The main reason was to avoid the usage of database as keeping a DB and maintaining it is a costly operation and will be overhead for a user. The project should take around 3 weeks' time to implement all the functionality.

5. Expected Results

Once this application is implemented and used, it will be able to store the data in an organized way. It will be able to take inputs from the user in the form of user attributes and perform necessary actions. Whenever user needs to use this application to see the previous data, it should be able to fetch the data from the file memory.