# Project Proposal

## COMP3006 Distributed Application Development

Proposal title: Finance Application

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## Functionality

I am looking to create a finance application that would help the user to reduce and track their spending. They should be able to add their purchases in the application and then generate graphs to see how they are doing. They should also be able to set a spending limit, which warns them if they are spending too much and can recommend places where they can reduce their budget. This should be used by a business and should be able to have multiple people accessing the same account at the same time

## Required properties

### Interactive

The user will be able to add and delete purchases on the app as well as generate graphs and add a spending limit. The purchases will be added in categories (food, bills etc)

### Database

The user’s identification number as well as purchases, current balance and spending limit will need to be stored in a database

### Web Sockets

The application will be used by businesses, so a notification to let the user know that the money has been added successfully to the server (probably by someone else)

### Structured

The application will need a login page and a home page.

A design pattern will be used to have add money/purchases with only the category being changed between each purchase.

I will need a section for:

* Adding Purchases
* Removing Purchases
* Seeing Balance
* Seeing Past History Of Purchases

## Planned Work

### Resources

Some of the libraries I intend to use are:

* JQuery – for manipulating the HTML to update information
* Node.Js – for the server
* Chart.js – for displaying the user’s spending

All of it will be developed on my computer, but will make checked to make sure it works on every platform

### Testing

The application will have unit tests to check everything works as well as manual usability checks to make sure it works on all browsers and the use of google lighthouse

### Work Plan

Most of the time will be spent developing the main application. The database should only need a small amount of time to develop.

Prior to main development I will make a storyboard to plan out how it will look at work.