

Investment Calculator Android Application

Software Development Plan

Version 1.0

6IMSOFTWENG Group 4

BRYAN ELIAND JOSH MANIAGO

GABRIEL CASTRO

JERICO MAGSINO

KENT STEVEN MERCADO

MARK JOSHUA ZUNIGA

ROMEL CABALHIN

Revision History

Date	Version	Description	Author
08/10/2021	1.0	Initial	
11/20/2021	1.0	Final Edits	

Table of Contents

[1. Introduction](#)

[1.1 Purpose](#)

[1.2 Scope](#)

[1.3 Definitions, Acronyms, and Abbreviations](#)

[1.4 References](#)

[2. Project Overview](#)

[2.1 Project Purpose, Scope, and Objectives](#)

[2.2 Assumptions and Constraints](#)

[2.3 Project Deliverables](#)

[2.4 Evolution of the Software Development Plan](#)

[3. Project Organization](#)

[3.1 Organizational Structure](#)

[3.2 External Interfaces](#)

[3.3 Roles and Responsibilities](#)

[4. Management Process](#)

[4.1 Project Estimates](#)

[4.2 Project Plan](#)

[4.2.1 Phase Plan](#)

[4.2.2 Iteration Objectives](#)

[4.2.3 Releases](#)

[4.2.4 Project Schedule](#)

[4.2.5 Project Resourcing](#)

[4.3 Project Monitoring and Control](#)

[5. Annexes](#)

Software Development Plan

1. Introduction

Investing allows us to put money that we aren't spending to work for. Money invested in stocks and bonds may help businesses and governments develop while also earning compound interest. Compound interest grows little deposits into substantial nest eggs over time.

An investment calculator can help figure out how to accomplish goals, whether they are just getting started with investing or a seasoned investor. It may show you how the size of the original investment, the regularity with which you contribute, and your risk tolerance all influence how their money grows.

1.1 Purpose

The purpose of the Software Development Plan is to collect all required data for project development. It is the top-level plan created and utilized by the project team members to do the development effort, and it outlines the approach to software development.

The following people use the Software Development Plan:

- Project team members will use it to figure out what they need to accomplish when they need to do it, and what other tasks they rely on.

1.2 Scope

The Scope of the Software Development Plan describes the overall plan to be used by the Investment calculator project. Starting from the development of the project to the designing of the overall results including the deployment of the product.

1.3 Definitions, Acronyms, and Abbreviations

Investment - an asset or item acquired with the goal of generating income.

Calculator - is a device that performs arithmetic operations on numbers. The simplest calculators can do only addition, subtraction, multiplication, and division.

Appreciation - refers to an asset's value increasing over time.

Parameter - a numerical or other measurable factor forming one of a set that defines a system or sets the conditions of its operation.

1.4 References

- Return on Investment and Grants: A Review of Present Understandings and Recommendations for Change, Michael Preuss, Research Management Review, Volume 21, Number 1 (2016), <https://files.eric.ed.gov/fulltext/EJ1134098.pdf>
- Calculator (2005), <https://whatis.techtarget.com/definition/calculator>
- Investment: Adam Hayes, <https://www.investopedia.com/terms/i/investment.asp>

1.5 Overview

This Software Development Plan contains the following information:

Project Overview — it describes the project's purpose, scope, and objectives. It provides the Assumptions and Constraints of the project. It also defines the deliverables that the project is expected to deliver as well as the progress of evolution in the SDP.

Project Organization — describes the organizational structure of the project team, external interfaces, and the roles and responsibilities of each member of the project team.

Management Process — outlines the project's projected cost and timeline, it also specifies the project's key phases and milestones, and describes how it will be monitored. It also explains risk management as well as configuration management.

Annexes — provides an overview of the software development process, including methods, tools, and techniques to be followed as well as additional material that was used in the SDP.

2. Project Overview

2.1 Project Purpose, Scope, and Objectives

An asset purchased to generate income or appreciation is referred to as an investment. When a person buys something as an investment, the goal is not to consume it, but to utilize it to produce wealth in the future. The Investment Calculator may be used to determine a certain investment plan parameter. The app reflects the parameters that need to be found.

2.2 Assumptions and Constraints

Assumptions:

- Team members have all the required skills.
- The team will get all the resources needed.
- All of the people that are involved at the beginning of the project will remain and stay in the project until the project is completed.
- The expected project's timeline can be met and the project will complete within the expected time.

Constraints:

- Sometimes the team members will not be able to participate because of some circumstances.

2.3 Project Deliverables

Deliverables for each project phase are identified in the Development Case.

The target delivery dates are specified in section *4.2.4 Project Schedule*.

2.4 Evolution of the Software Development Plan

The Software Development Plan will be revised before the start of each Iteration phase. The criteria for revisions and reissue is If there are any formulas that have been inputted incorrectly.

3. Project Organization

3.1 Organizational Structure

The project team consists of 5 members and has the skills and knowledge to develop the investment calculator.

3.2 External Interfaces

Once the app has been deployed it is accessible and open to everyone. Anyone interested in investing can use the product to help them gain information about their investments.

3.3 Roles and Responsibilities

Anyone on the project can perform any roles and responsibilities.

4. Management Process

4.1 Project Estimates

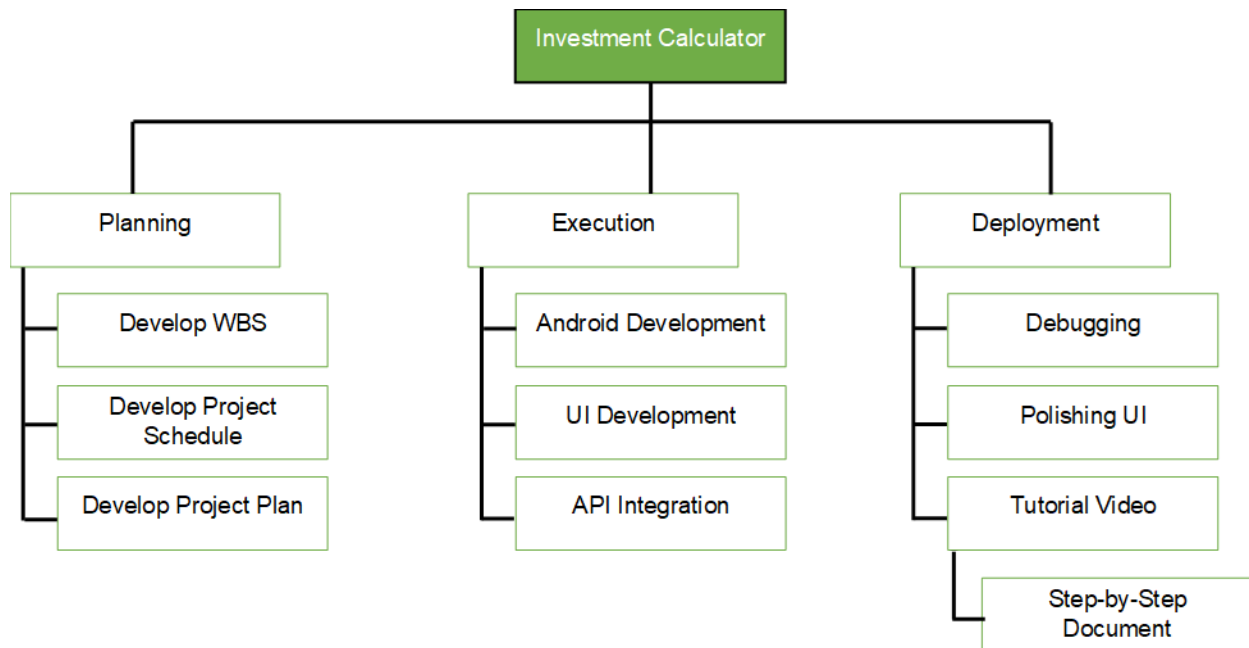
The project will be completed before the 1st-semester Finals exam. The project is estimated to use little to no financial resources to fully develop this project.

4.2 Project Plan

The project started on September 25, 2021, approximately after 2 months. The team has finished developing the project. The project has no expenses because it is a requirement for the team to pass this semester.

4.2.1 Phase Plan

Work Breakdown Structure



GANTT CHART

TASK NAME	25-Sep	30-Sep	05-Oct	10-Oct	15-Oct	20-Oct
PLANNING						
PROPOSAL						
ANALYSIS						
RESEARCH						
UI DESIGN						
DFD						
DEVELOPMENT						
POLISHING						
DEMO						

TASK NAME	25-Oct	30-Oct	04-Nov	09-Nov	14-Nov	19-Nov	24-Nov
PLANNING							
PROPOSAL							
ANALYSIS							
RESEARCH							
UI DESIGN							
DFD							
DEVELOPMENT							
POLISHING							
DEMO							

4.2.2 Iteration Objectives

The development only has one iteration to build and develop.

4.2.3 Releases

The initial plan for the investment calculator includes assets, basic and ROI calculator that consists of our demo app however updates for beta and succeeding updates will be developed when the time comes. Currently, only a demo will be available at this time.

4.2.4 Project Schedule

November 20, 2021 completion of DEMO for Investment Calculator

4.2.5 Project Resourcing

Five members of Entry-Level Programmers will suffice for this Investment Calculator Application. Requirements for the developers is basic knowledge of dart and flutter language is necessary. Also, no special training is required for this Software Development.

4.3 Project Monitoring and Control

- Requirements Management: The changes during the development phase are controlled using git. Changes are recorded and assessed before committing to the main file stored in GitHub.
- Schedule and Budget Control: Since this software development is a school project no budget is expended on this project. Devices and resources to develop the software are all shouldered by the developers. All developers are responsible for their assignments. Developers report to each other on their progress using message channels available on the internet. Reports usually will be done before the weekends.
- Quality Control: Changes are required to be assessed before committing to main to avoid conflict. Developers that are currently working are required to inform others on the message channel. Stating the work they planned to achieve and the progress they have made. Changes that have been labeled as errors are required to be uploaded in the error archives adding a brief description, date, type of error, and filename. All files are uploaded to the discord channel for backup purposes.
- Reporting and Measurement: Since there is no budget allocated in the project reports are only done when progress has been made and difficulties encountered.
- Risk Management: Since the project is an open-source software only minimal risk management is needed for the Software Development.
- Project Close-out: Using discord application and GitHub. The software developments are all uploaded in their respective storages. Changes with errors are not advised to be uploaded in the git repository thus the discord will act as our archives. Developers are recommended to submit a report stating the progress they have made and certain difficulties they have encountered while programming.
- Configuration Management: Changes are reported to our communication channel stating the work and changes they have done. Before changes are committed to the main file one developer must assess the change and create backups in the archives. Weekly reports are encouraged to inform their companions of the changes that have

been made. Each developer has their assignment but is not limited to their work. They can help if asked by their co-developer.

- Process Improvement Plan: To improve the process and increase efficiency developers are advised to work on their assignments a lot earlier before the deadline. And only by having effective communication can work be accomplished.

5. Annexes

The project will follow the RUP for Small Projects process, as tailored by the project Development Case.

Other applicable process plans are listed in the references section, including Programming Guidelines.