SAL-ULATOR

An Android Mobile Application Project presented to the

Faculty of Information Technology

School of Arts, Science, and Technology

The National Teachers College

629 J. Nepomuceno St., Quiapo Manila

By

Condino, Stephen David Q. Angsantos, Justine Donn B. Fundal, Justine Felix V. Mico, Rhobert Angelo S. Sison, Krizha Kimberly J. Baldono, Persieval Angelo Gomez, Christian A.

In Partial Fulfillment of the
Requirements for the subject
Mobile Development focusing on Android Development

APPROVAL SHEET

This Android mobile application entitled "SAL-ULATOR" were prepared and submitted by:

Condino, Stephen David Q. Angsantos, Justine Donn B. Fundal, Justine Felix V. Mico, Rhobert Angelo S. Sison, Krizha Kimberly J. Baldono, Persieval Angelo Gomez, Christian

has been approved by the subject adviser as partial fulfillment of the requirements for the subject **MOBILE DEVELOPMENT FOCUSING ON ANDROID DEVELOPMENT.**

PROF. JOHN PAULO I. PERMINOLA

Subject Adviser

TABLE OF CONTENTS

Chapter I. PLANNING STAGE
1.0 Introduction
1.1 Objective of the Study
1.2 Scope and Limitation of the Study
1.3 Significance of the Study
1.4 Requirements Gathering
1.5 Visual Table of Contents Diagram
1.6 Definition of Terms
Chapter II. UI / UX DESIGN
2.0 Information Architecture
2.1 Wireframes
2.2 Prototyping
2.3 Mockups
Chapter III. DEVELOPMENT
3.1 Mobile Architecture
3.2 Project Development
3.3 Project Builds
3.4 Pre-Testing process

CHAPTER I

THE PROBLEM AND ITS BACKGROUND

1.0 Introduction

We are the maker or the developer of this app and we call it sal-ulator (salary calculator). We make it for the people who want to calculate their salary. They will input the information they want to compute.we make it easy for the people who want to look for their salary. And how much the boss will deduct them like TAX, SSS etc.

We make it more reliably easy to use and more budget friendly. You can download it using apk on android and qr code on iphone. We design it more naturally for the user's perspective. And we interview some of the people about our application and we make their suggestions from their feedback. You can use it without the internet for you to calculate everywhere anywhere and wherever you are.

1.1 Objective of the Mobile Application

This application's primary objective is to provide assistance to workers in monitoring their daily and monthly revenue, which will enable them to efficiently manage their budget in accordance with their day-to-day expenditures.

1.2 Scope and Limitation of the Mobile Application

We are able to test this program on Mobile Emulator as well as any kind of mobile phone device. This application is compatible with any device, including the iPhone and Android. Our primary target audience consists of workers whose pay is still based on a daily rate, and this program is compatible with all versions of Android and iOS.

	Live test apps while coding	Test apps with an Android emulator	Share app source code	Use extensions in your code	Install apps on phone or tablet
iOS	✓	✓	✓		**
Android	✓	✓	✓	✓	✓

1.3 Significance of the Study

The advantages of our application is that it allows them to budget their daily income, which ensures that they do not fall short when it comes to budgeting their wages.

1.4 Requirements Gathering

IDE: MIT App Inventor

Framework: MIT App Inventor Package

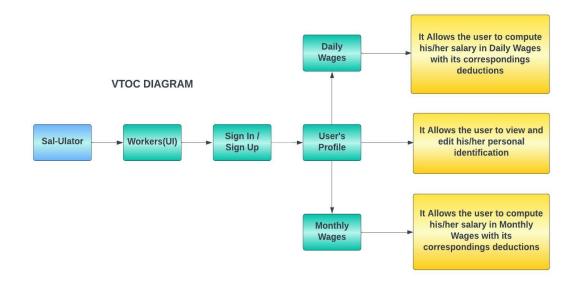
Programming Language: Block-Based Coding

Database: TinyDB

Device For Testing: Infinix Note 12 G96, Android 13 / Mobile Emulator

Designing Tools: Adobe Photoshop, Canva

1.5 Visual Table of Contents Diagram



1.5.1 Daily Wages / Blue Collar Workers

• It allows the user to compute its salary that counts on Daily Wages or a Blue Collar type of worker with its corresponding deductions and enough computation.

1.5.2 Monthly Wages / White Collar Workers

• It allows the user to compute its salary that counts on MonthlyWages or a White Collar type of worker with its corresponding deductions and enough computation.

1.5.3 User's Profile

• It allows the user to view and edit personal information.

1.6 Definition of terms

- MIT App Inventor is an intuitive, visual programming environment that allows everyone - even children - to build fully functional apps for Android phones, iPhones, and Android/iOS tablets.
- Block-based Coding a form of programming language where the developer issues instructions by dragging and dropping blocks. This helps to prevent syntax errors and developers do not have to memorize syntax to write code.
- **TinyDB** is designed to be simple and fun to use by providing a simple and clean API. Works on all modern versions of Python and PyPy. Like MongoDB, you can store any document (represented as dict) in TinyDB.
- Blue Collar Worker refers to individuals who engage in hard manual labor, typically in the agriculture, manufacturing, construction, mining, or maintenance sectors. Most of these people historically wore blue collared shirts when they worked. Some blue-collar workers may have to do physically exhausting tasks.

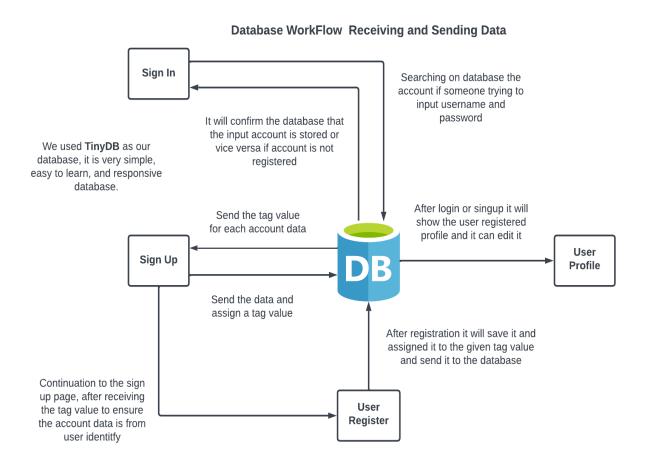
• White Collar Worker - are often found in office settings. As the name implies, they are generally suit-and-tie workers who wear white-collared shirts. Their jobs may involve working at a desk in clerical, administrative, or management settings. Unlike blue-collar workers, white-collar workers don't have physically taxing jobs.

CHAPTER II

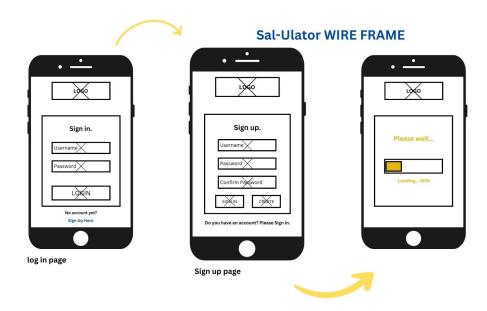
UI/IX DESIGN

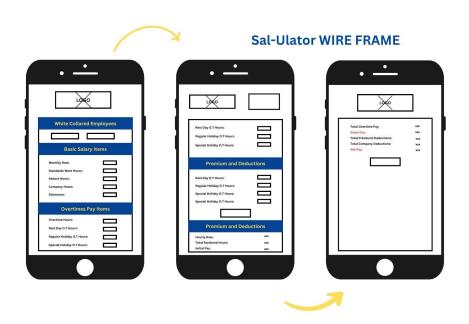
This chapter indicates the interaction between users and digital products that focuses on the overall experience, usability, and accessibility of a user interface. To ensure that users can easily access and accomplish their goals by navigating and interacting with the user interface.

2.0 Information Architecture



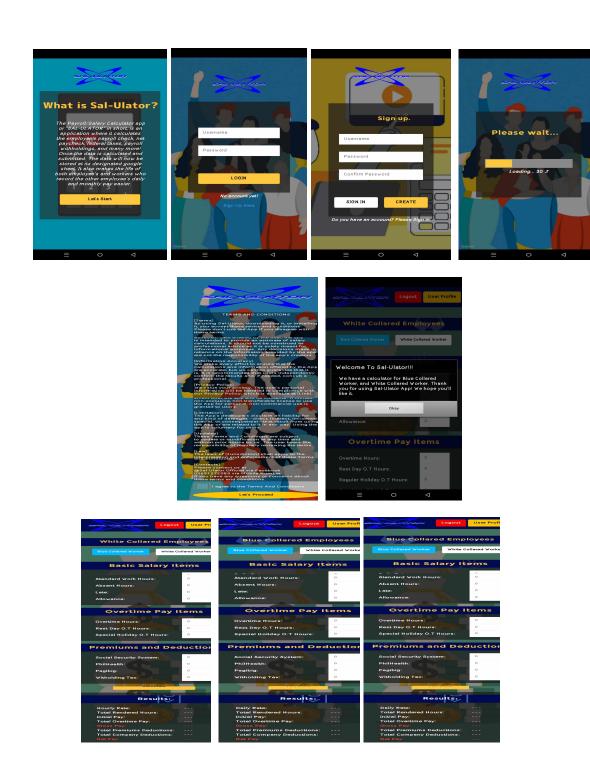
2.1 Wireframes





2.2 Prototyping

10



2.3 Mockups





Once the data is calculated and submitted, The data will now be stored at its designated google sheet, it also makes the life of both employee's and workers who record the other employee's daily and

Sal-ulator UI









CHAPTER III DEVELOPMENT

Those new to MIT App Inventor can have a simple first app up and running in less than 30 minutes. And what's more, our blocks-based tool facilitates the creation of complex, high-impact apps in significantly less time than traditional programming environments. The MIT App Inventor project seeks to democratize software development by empowering all people, especially young people, to move from technology consumption to technology creation.

3.1 Mobile Architecture

- It's easy to identify our UI, it's enough font and the text is in contrast to its background color.
- We use Canva and Adobe Photoshop for a responsive editing app, and it has enough resources and is capable of epic designs.

3.2 Project Development

- Our Coding process is Block-based coding. For someone who doesn't know what
 Block-based coding is, Block-based coding is like you trying to code by drag and drop
 of a piece of puzzle with corresponding values or codes, such as statements, logical,
 conditional, procedures, etc...
- It's easy to declare a variable and to construct the logic of the project.
- In terms of editing or design in our project, our IDE from MIT App inventor had built-in toolbar that has quite simple stuff, we are aware that our IDE is simple and has limited resources but the good thing is even though it is simple it also has a built-in database on the toolbar, for example ad spreadsheet, MongoDb, a TinyDB that created by Python language, and we use TinyDB as our Database, so even its simple our IDE is very responsive and productive.

3.3 Project Builds

- As of now we are only processing the last workspace on our app which is the user's profile and user registration, we are working on its layout.
- At The Start of our First page "Welcome Page" it has a simple explanation of our App, title and a one clickable button that will transfer you to another page, the Login Page.
- Login page is simple like other login pages, it has a username textbox, passwords and. sign up button, in Sign Up page it has username textbox, passwords, confirm password, sign in button and create button.
- Create Button will transfer you to users registration page (user registration page is still ongoing) and after filling up it will transfer you to Terms And Conditions page.
- Terms and condition pages will show you anything of the app, the limitation and where the user needs to contact in case of an emergency of the application, after clicking the Let's proceed button it will transfer to the loading screen.
- Loading screen content is a simple progress bar and after the bar reaches 100% it will transfer the user to the Blue Collar worker calculator.
- Blue collar and white collar worker page is similar to each other it just the only differences is their variable and the logic or the backend of the application, it has a Logout button that will back you to the login page and user profile button that will transfer the user to user profiles page.

3.4 Pre-Testing process

- In the testing process, if we only have a laptop or pc that is available, we use the "aiStarter Emulator". It is like a mobile emulator that will present a live mode of our app while we edit in the backend.
- But if we are capable to have an available to use, we're trying to connect it to the IDE we used to our mobile phone and it will present the live mode of our app, we connect it with wireless connection and its relieve on us.

REFERENCES

Parietti, M. (2023, February 7). Blue-Collar vs. White-Collar: What's the Difference? Investopedia.https://www.investopedia.com/articles/wealth-management/120215/blue-collar-vs-white-collar-different-social-classes.asp#:~:text=The%20term%20blue%2Dcollar%20worker,to%20do%20physically%20exhausting%20tasks.

Introduction — TinyDB 4.8.0 documentation. (n.d.).

https://tinydb.readthedocs.io/en/latest/intro.html

MIT App Inventor. (n.d.). https://appinventor.mit.edu/