AI powered Mobile Application Documentation

Table of Contents

Introduction

- Purpose and Overview
    - This document serves as the comprehensive documentation for the Restaurant App **Heaven's Cloud**. It outlines the project's objectives, requirements, design, development, testing, deployment, and maintenance details.

- Document Revision History

Version	Date	Description	Author
1.0	2023-10-09	Initial Release	Renee Bethapudy
1.1	2023-10-13	Updates/ Revisions	Renee Bethapudy

Project Overview

- Project Name : **Heaven's Cloud**

- Team Members
    - Project Manager: Renee Bethapudy
    - Developers: Renee Bethapudy, Harshitha Yarra, Srihita Karempudi
    - Designers: Renee Bethapudy ,Harshitha Yarra ,Srihita Karempudi
    - QA/Testers: Renee Bethapudy ,Srihita Karempudi, Harshitha Yarra

- Stakeholders : Renee Bethapudy, Harshitha Yarra, Srihita Karempudi

- Project Goals and Objectives
    - Increase Customer Engagement
    - Enhance User Experience
    - Improve Customer Loyalty
    - Facilitate Online Payments
    - Improve Marketing Efforts

Requirements

- Functional Requirements
    - Welcome Page
    - Login Page
    - Menu Display
   - Search and Filter Options

- Billing Page
- Payment Gateway
- Location Tracker

- Use Cases and User Stories
  - Can be used instead of traditionally used physical menus as an alternative
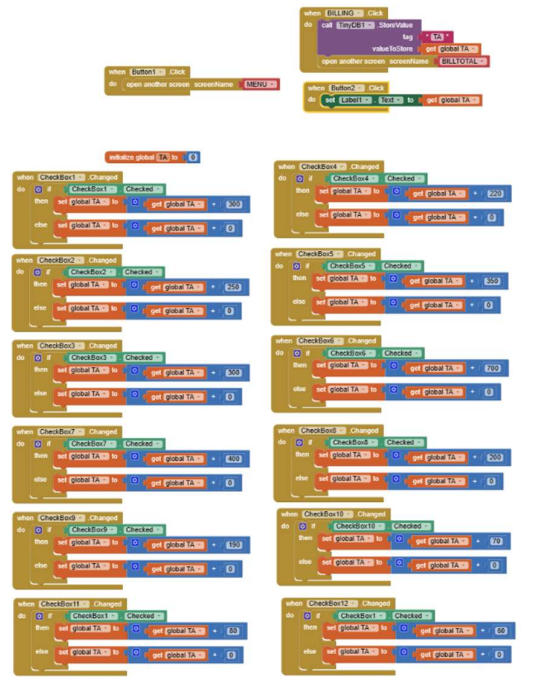 - Can be used to promote digital transactions

Architecture

- High-Level Architecture
  - The overall architecture of our mobile app. These are the screenshots of the code blocks used in the Heaven's Cloud Project.

- Welcome Page followed by Login Page

```
when Screen1 .Initialize
do  call KIO4_AniGif1 .LoadGif
                image    Image1
                nameFile  " I4g.gif "
                color
    call KIO4_AniGif1 .MoveStart
                speed  100
    call Player1 .Start
```

```
when KIO4_AniGif1 .Frames
    frame
do  set Image1 . Picture to get frame
```

```
when Button1 .Click
do  open another screen screenName Screen2
```

```
when Button2 .Click
do  open another screen screenName Screen1
```

```
when Screen2 .Initialize
do  call Player1 .Start
```

```
when Clock1 .Timer
do  call Player1 .Start
```

```
when Button1 .Click
do  if  PasswordTextBox1 . Text = " 1234 "
    then  open another screen screenName MENU
```
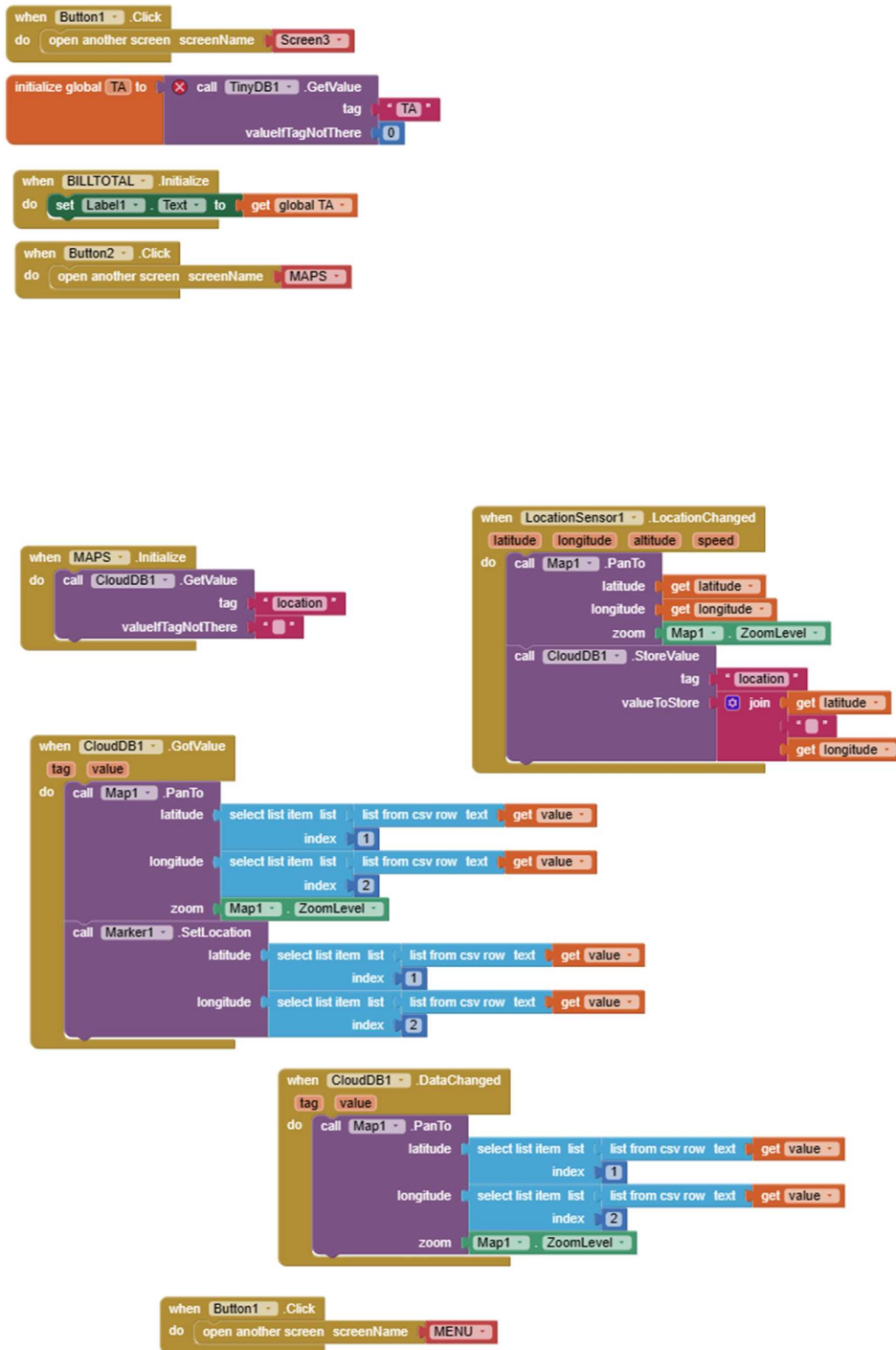
Menu Page : Consists of Search and Filter Options, Visual Display, Menu At A Glance, Choose Menu and Locate Us features
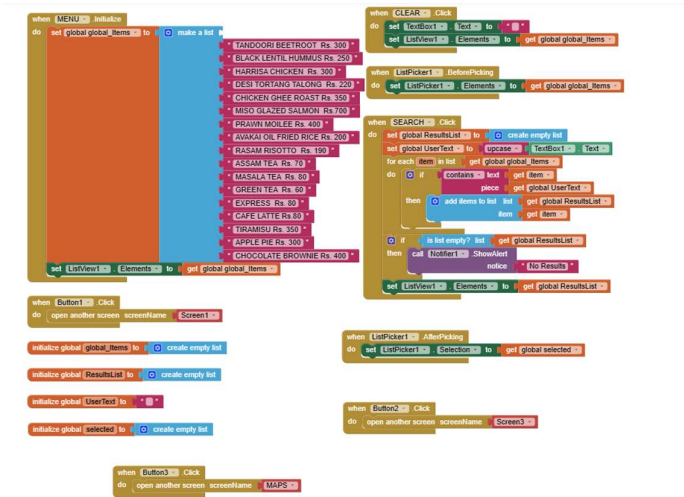
Billing Page : We have used a Checkbox themed billing page for the customer to choose their items. Clicking on the Payment button leads to the Payment Gateway.

Locate Us Feature : Enables Location Tracking

```
when Button1 .Click
do  open another screen screenName  Screen3

initialize global TA to  ⊗ call TinyDB1 .GetValue
                              tag           " TA "
                              valueIfTagNotThere  0

when BILLTOTAL .Initialize
do  set Label1 . Text  to  get global TA

when Button2 .Click
do  open another screen screenName  MAPS
```

```
when MAPS .Initialize
do  call CloudDB1 .GetValue
                        tag            " location "
                        valueIfTagNotThere  " "
```

```
when LocationSensor1 .LocationChanged
    latitude  longitude  altitude  speed
do  call Map1 .PanTo
                latitude   get latitude
                longitude  get longitude
                zoom       Map1 . ZoomLevel
    call CloudDB1 .StoreValue
                tag            " location "
                valueToStore   ⊙ join  get latitude
                                       " "
                                       get longitude
```

```
when CloudDB1 .GotValue
    tag  value
do  call Map1 .PanTo
                latitude   select list item list  list from csv row text  get value
                                          index   1
                longitude  select list item list  list from csv row text  get value
                                          index   2
                zoom       Map1 . ZoomLevel
    call Marker1 .SetLocation
                latitude   select list item list  list from csv row text  get value
                                          index   1
                longitude  select list item list  list from csv row text  get value
                                          index   2
```

```
when CloudDB1 .DataChanged
    tag  value
do  call Map1 .PanTo
                latitude   select list item list  list from csv row text  get value
                                          index   1
                longitude  select list item list  list from csv row text  get value
                                          index   2
                zoom       Map1 . ZoomLevel
```

```
when Button1 .Click
do  open another screen screenName  MENU
```

- Technology Stack
  - Extension Used For Importing Gifs : com.KIO4_AniGif.aix
  - Used Player for background music and other sound effects
  - Notifier and Clock to play sound in a particular time interval
  - LocationSensor used to track location
  - CloudDB and TinyDB used as database for maps and storing bill value respectively.

Design

- User Interface Design: High Contrast Theme with attractive visual elements.
- Wireframes and Mockups

1. Welcome Page
2. Login Page
3. Menu Page
4. Billing Page
5. Payment Gateway
6. Maps/ Location Tracker
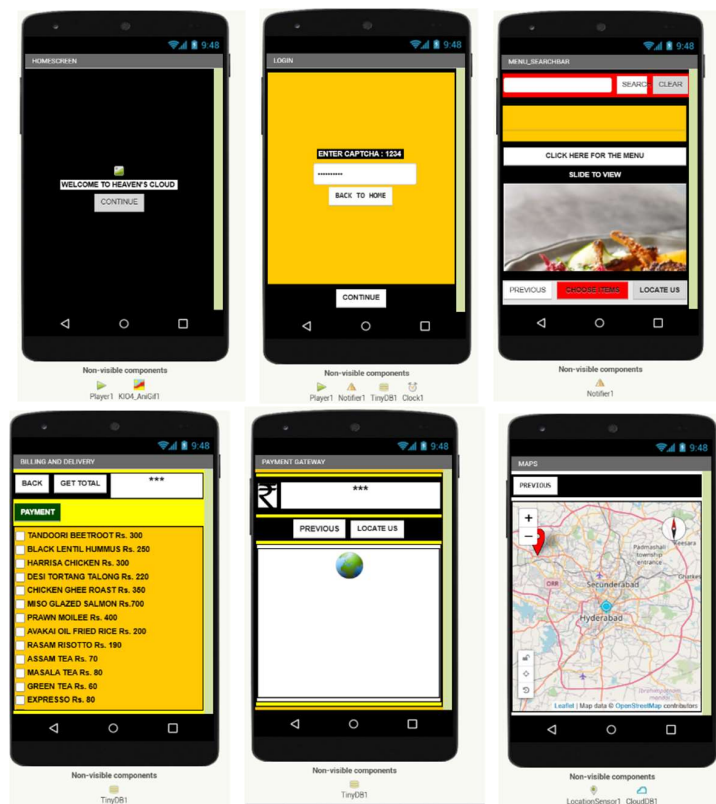
- Database Schema
  - TinyDB used for storing cumulative bill value
  - CloudDB used to store location coordinates to enable tracking

User Documentation [Heaven's Cloud]

- Introduction
  - Welcome to Heaven's Cloud : An Introduction
  - Getting Started: How to Begin Using the App

- Key Features with screenshots

  - Feature 1: Login Page
    - How to Access : Click on Continue Button
    - How to Use : Enter Captcha to proceed
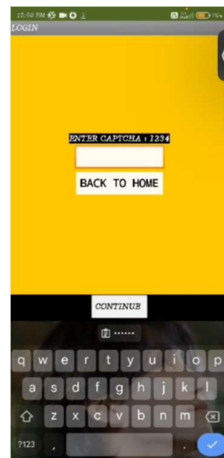
  - Feature 2: Menu Display
    - How to Access: Login with correct captcha to proceed
    - How to Use: Choose Menu to select dishes. Swipe to see visual menu
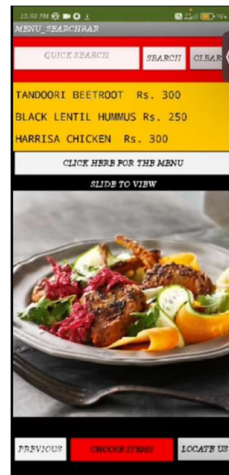
- ○ Feature 3: Search and Filter Options
    - ■ How to Access: Click the white button below the search bar
    - ■ How to Use: Search bar and menu at a glance are accessory features.
    - ■ Click on the Red Button – Choose Menu to select your options

- ○ Feature 4: Billing Page
    - ■ How to Access: Click CHOOSE MENU in the Menu page
    - ■ How to Use: Select items and click on GET TOTAL to view the final bill. Proceed to Billing by clicking on the green PAYMENT button.
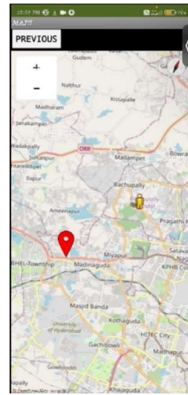

- ○ Feature 4: Payment Gateway
    - ■ How to Access: Click on the Payment Button in the Billing and Delivery Page
    - ■ How to Use: Log in and Pay using the official website of the bank

- ○ Feature 4: Location Tracker
    - ■ How to Access: Click the Locate Us button
    - ■ How to Use: The page Automatically displays your live location. The Location of the Restaurant is also marked in red.

- ● Troubleshooting and FAQs

    - ○ Common Issues: Solutions to Frequently Encountered Problems
        - Requires few minutes to Display Payment Gateway due to Network Connectivity, Integration Issues or Server Performance

    - ○ FAQs: Answers to Frequently Asked Questions
        - The Payment Gateway is not Loading !
            - o In this situation it is recommended to wait for a few minutes or refresh the page.
            - o Check for network connectivity issues
            - o If the problem persists, reload the app