**APP STORE SHOP SALE PHONE**

**Software Design Specification**

**May 19, 2022**

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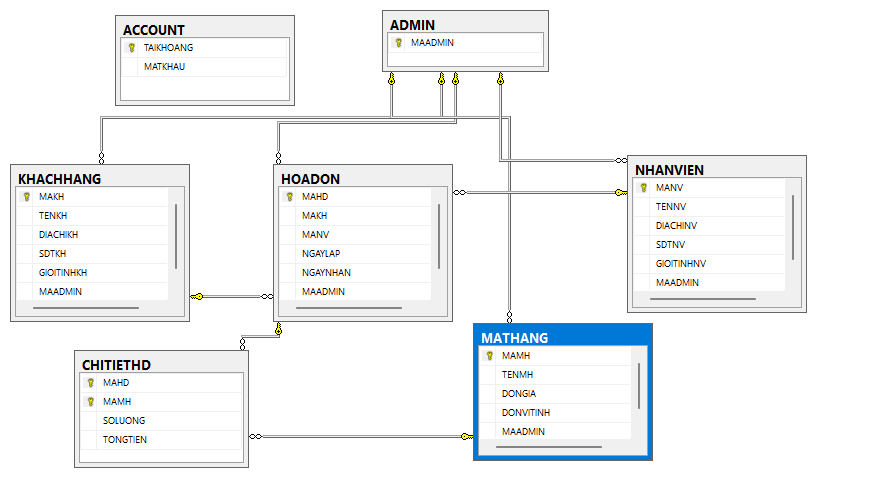
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# 

# 1.0 Architectural design

### 1.1.1 Architecture diagram



# 2.0 Schedule

## 2.1 Definition of milestones

### 2.2.1 Concept/Doc Complete 25/4/2022

All concept related documentation such as module definitions, data flow diagrams, user diagrams, etc will be completed by this date. The Requirements Documentation and System Design Documentation will be completed by this date such that module design and coding may begin.

### 2.2.2 Module Code Complete 4/5/2022

All module coding should be completed by this date so that module integration and system testing begin. Depending on Integration complexity, integration may begin 1 week before this milestone. All modules and sub-programs are expected to be fully functional and extensively tested.

### 2.2.3 Testing Complete 12/5/2022

All testing should be finished by this date and the program should be essentially complete. The remaining time may be used for small UI tweaking and documentation updates.

# 3.0 Component-level design

Our system is based around a main menu through which each of the individual shop can be accessed. At any time the user can exit a app, which will return them to the main menu.

## 3.1 Description for Main Menu

The main menu is the first thing a user will see when launching the application on their Android based phone.

### 3.1.1 Narration Processing for Main Menu

From the main menu, the user can select one of three functions. After selecting a function, the activity specific to that function is launched. If the user chooses to exit the application will be closed and the user will return to the IOS operating system interface.

### 3.1.2 Description of the Main Menu interface

The main menu will include a simple list of buttons corresponding to functions as well as a button to choose to exit the application.

### 3.1.3 Main Menu processing detail

### 3.1.3.1 Performance issues

The main menu will use relatively little resources, as it will just be a list of buttons.

### 3.2.3.2 Design constraints

The main menu should be simple and easy to use to access individual functions.

## 3.2 Description of the functions

The individual functional elements will be launched from the main menu and will run independently of each other.

### 3.2.1 Narrative processing for functions

When each function is launched, the user is logged in. The user selection will result depending on the item the user selects . The process by which the user makes selections and the results are processed will continue until

product is completed, successfully or otherwise, or the user chooses to quit or restart the application. Users will also have the option to restart the application, which will result in the process starting from scratch.

### 3.2.2 Description of individual functional interfaces.

Each function will have on-screen buttons that the user can press to use.

### 3.2.3 Application handling details

### 3.2.3.1 Performance issues

Each function responds quickly to user input via on-screen buttons. Delayed responses can lead users to despair or believe that the application is frozen.

### 3.2.3.2 Design constraints

The design of the interface for the application should be simple and intuitive so that the user can easily identify the options, easy to use.

# 4.0 User interface design

Below is the prototype design of each application functional interface.

## 4.1 Description of the user interface

Screenshots from each app are shown using the Software Development Kit via lightshot.

### 4.1.1 Login Screen

### 4.1.1.1 Screen Shot for login screen



Hình 1: Login Screen

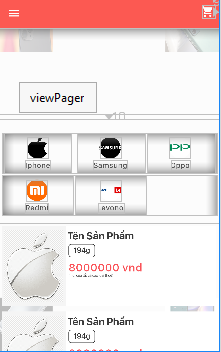
### 4.1.1.2 Objects and actions for login Screen

Objects:

|  |  |  |
| --- | --- | --- |
| **Item** |  |  |
| **Login button** | Tap on the button | The main screen will be displayed when the login is successful |
| Tap on the button | If you enter the wrong password or account, a message window will appear asking you to re-enter it. |
| **“Quên mật khẩu”** | Tap on the link | Forgot password screen allows to create a new password based on the phone number or gmail created when registering |
| **“Bạn chưa có tải khoản?Tạo cái mới”** | Tap on the link | Show the register screen |
| **EditText ”Gmail”** | Tap on the EditText | Show the characters the user enters from the keyboard |
| **EditText “Mật khẩu”** | Tap on the EditText | Show the characters the user enters from the keyboard |

### 4.1.2 Shop Sale Phone Home Screen

### 4.1.2.1 User Interfaces



Hình 2: Home Screen

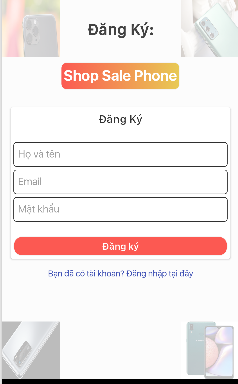
### 4.1.2.2 Objects and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| **Cart button** | Tap on the button | Show products that have been added to the cart |
| Iphone button | Tap on the button | Show products from iphone |
| Samsung button | Tap on the button | Show products from SamSung |
| Oppo button | Tap on the button | Show products from Oppo |
| Redmi button | Tap on the button | Show products from Redmi |
| Levono | Tap on the button | Show products from Lenovo |
| List of product | Click product | Show product details |
| List bar |  |  |

### 

### 4.1.3 Shop Sale Phone Register Screen

### 4.1.3.1 User Interfaces



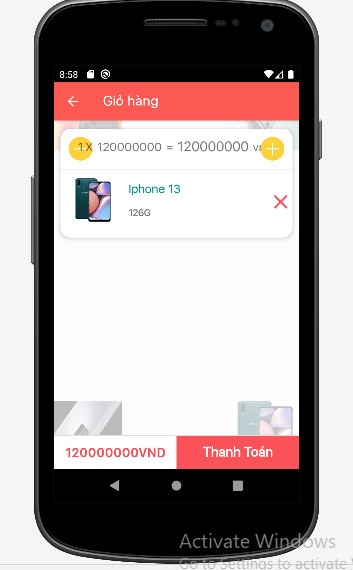
Hình 3: Register

### 4.1.3.2 Objects and actions for Enter user information

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| **Register button** | Tap on the button | Sign Up Success |
| Tap on the button | Display a message that has the same name or gmail |
| “Bạn đã có tài khoản? Đăng nhập tại đây” | Tap on the link | show login screen |
| **EditText ”Gmail”** | Tap on the EditText | Show the characters the user enters from the keyboard |
| **EditText “Mật khẩu”** | Tap on the EditText | Show the characters the user enters from the keyboard |
| **EditText “Họ Tên”** | Tap on the EditText | Show the characters the user enters from the keyboard |

### 4.1.4 Shop Sale Phone Cart Screen

### 4.1.4.1 User Interfaces



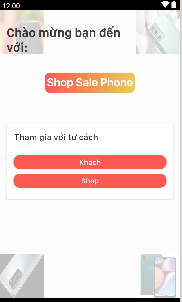
Hình 4: Cart

### 4.1.4.2 Objects and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| **Pay button** | Tap on the button | switch to payment screen |
| **Delete Button** | Tap on the button | allow users to cancel products in the cart |
| Back button | Tap on the button | back to home screen |
| TextView | N/A | Show product price |
| List of product | Click product | Edit products (quantity, color) |

### 4.1.5 Shop Sale Phone References Screen

### 4.1.5.1 User Interfaces



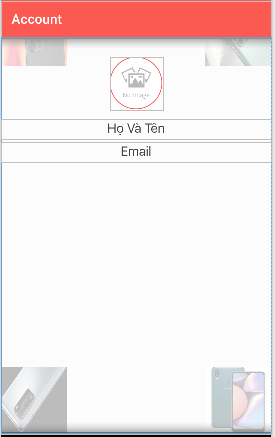
Hình 5: References

### 4.1.5.2 Objects and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| **“Khách” button** | Tap on the button | switch to home screen |
| “Shop” | Tap on the button | switch to home screen |

### 4.1.6 Shop Sale Phone Account Screen

### 4.1.6.1 User Interfaces



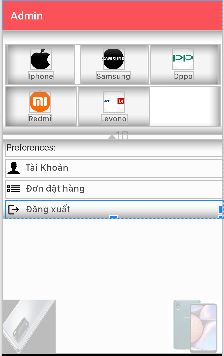
Hình 6: Account

### 4.1.6.2 Objects and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| **“Họ và tên” TextView** | N/A | N/A |
| **“Gmail” TextView** | N/A | N/A |
| **ImageView** | Tap on the Image | allow the user to change the image |

### 4.1.7 Shop Sale Phone Shop Account Screen

### 4.1.7.1 User Interfaces



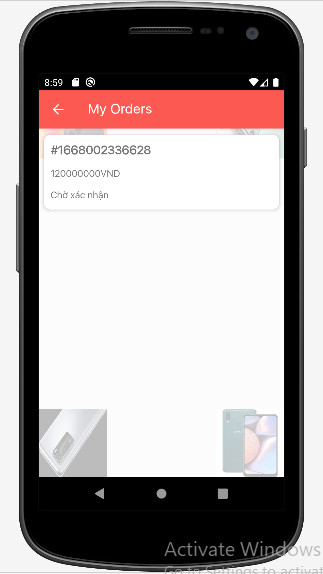
Hình 7: Shop Account

### 4.1.7.2 Objects and Action

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| **“Đăng xuất” button** | Tap on the button | exit the app |
| Iphone button | Tap on the button | Show products from iphone |
| Samsung button | Tap on the button | Show products from SamSung |
| Oppo button | Tap on the button | Show products from Oppo |
| Redmi button | Tap on the button | Show products from Redmi |
| Levono button | Tap on the button | Show products from Lenovo |
| “Đơn đặt hàng” button | Tap on the button | show orders placed |
| “Tài khoản” button | Tap on the button | Show shop information and edit |

### 4.1.8 Shop Sale Phone Order Screen

### 4.1.8.1 User Interfaces



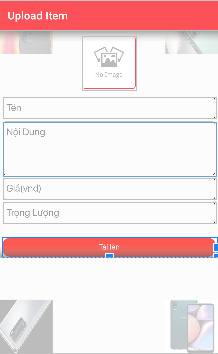
Hình 8: Order

### 4.1.8.2 Objects and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| Back button | Tap on the button | back to home screen |
| List of product | Click product | view customer information and payment method selected customer and ship |
| **“Mã đơn hàng” TextView** | N/A | Show order number |
| **“Giá” TextView** | N/A | Show product price |
| **“Chờ xác nhận”** | N/A | order status |

### 4.1.9 Shop Sale Phone Add Product Screen

### 4.1.9.1 User Interfaces



Hình 9: Add product

### 4.1.9.2 Objects and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| Back button | Tap on the button | back to home screen |
| ImageView | Tap on the Image | lets choose the right image |
| “Product Name” EditText | Tap on the TextView | Allow the user to input from the keyboard |
| “Description” EditText | Tap on the TextView | Allow the user to input from the keyboard |
| “Price” EditText” | Tap on the EditText | Show the character entered by the user |
| “Weight” EditText | Tap on the TextView | Show the character entered by the user |
| “Add” button | Tap on the button | Products will be displayed on the homepage |

### 4.1.10 Shop Sale Phone Shop Order Screen

### 4.1.10.1 User Interfaces

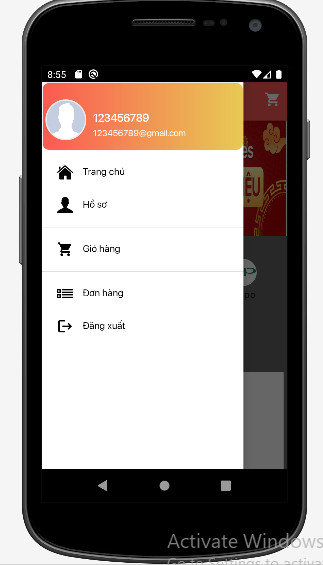
Hình 10: Shop Order

### 4.1.10.2 Object and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| Back button | Tap on the button | back to home screen |
| “Xác nhận” button | Tap on the button | order confirmation from customer and ship |
| List of product | Click product | view customer information and payment method selected customer and ship |

### 4.1.11 Shop Sale Phone Account User Screen

### 4.1.11.1 User Interfaces



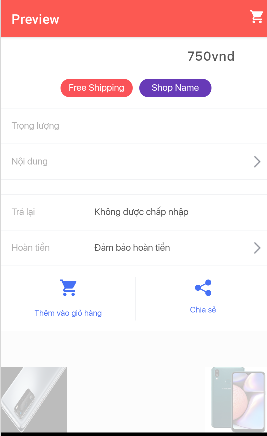
Hình 11: Acount User

### 4.1.11.2 Object and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| **“Đăng xuất” button** | Tap on the button | exit the app |
| Home button | Tap on the button | Go to the homepage interface |
| Account button | Tap on the button | go to profile interface |
| Cart button | Tap on the button | go to cart interface |
| Name TextView | N/A | N/A |
| Gmail TextView | N/A | N/A |
| Avatar ImageView | N/A | N/A |

### 4.1.12 Shop Sale Phone Preview Screen

### 4.1.12.1 User Interfaces



Hình 12: Preview

### 4.1.12.2 Object and actions

|  |  |  |
| --- | --- | --- |
| **Item** | **Action** | **Response** |
| FreeShip button | Tap on the button | Clicking on this button will display the offers that this product has available |
| Shop Name button | Tap on the button | View shop information |
| Cart button | Tap on the button | go to cart interface |
| “Trả lại” button | Tap on the button |  |
| “Hoàn tiền” nutton | N/A | N/A |
| Add Cart button | Tap on the button | Clicking this button will add the product to your cart |
| Share button |  |  |
| Price TextView | N/A | N/A |
| KG TextView | N/A | N/A |
| Description TextView | N/A | N/A |

# 5.0 Restrictions, limitations, and constraints

All development for the Shop Sale Phone was done in the Android Software Development Kit (SDK). Testing of the application was done on the Android Emulator that was included with the Android SDK. As long as the Android is available to Android mobile Operating System users, the software will be marketable, maintainable and functional to both users and developers

# 6.0 Testing Issues

## 6.1 Classes of tests

We will conduct tests on each interface as separate entities using the Android Emulator provided by the Android Software Development Kit (SDK). After each individual interface is thoroughly tested, the package is built together and tested as a whole. All known valid input will be checked as well as known invalid input. A more comprehensive overview of our testing strategies will be included in our test specification document.

## 6.2 Expected software response

Each test performed will be clearly observed as either failing or succeeding.

# 7.0 Appendices

## 7.1 Packaging and installation issues

Phần mềm sẽ được đóng gói và phân phối dưới dạng gói cài đặt ứng dụng trong Android. Nó sẽ có sẵn cho tất cả người dùng thiết bị di động chạy Hệ điều hành Android phiên bản 1.5 trở lên.

## 7.2 Legal Considerations

We will use the Android Software Development Kit (SDK) under the Android SDK License Agreement distributed by Google (Origin SDK's Copyright Holder). This agreement grants us as developers a “limited, worldwide, royalty-free, non-transferable, and non-exclusive license to use the SDK solely to develop applications for Android platform”.