

# SOFTWARE DESIGN AND CONSTRUCTION

## Assignment 06-Graphical Interface Design

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### 1. SUBMISSION GUIDELINE

You are required to push all your work to the valid GitHub repository complying with the naming convention:

"<MSTeamName>-<StudentID>.<StudentName>".

For this lab, you have to turn in your work twice before the following deadlines:

- **Right after class:** Push all the work you have done during class time to Github.
- **10 PM the day before the next class:** Create a branch named "*release/lab06*" in your GitHub repository and push the full submission for this lab, including in-class tasks and homework assignments, to this branch. Remember to export your diagrams to PNG files and push them with .astah files to GitHub.

### 2. GRAPHICAL USER INTERFACE DESIGN

In this section, we will get familiar with the software detailed design process and start with interface design for the Case Study.

You are asked to work individually for this section, and then put all your file(s) and directories to a directory, namely "DetailedDesign/GraphicalInterfaceDesign". After that, push your commit to your individual repository before the announced deadline.

Boundary classes are used to model the interaction between a system and its surroundings, i.e., its actors. Hence, they can be utilized to capture the requirements on a user interface. The interactions between people and systems might be through various kinds of user interfaces (UI) such as batch interface, command-line interface (CLI), and graphical user interface (GUI).

In this subsection, we use GUI to illustrate how to design UIs step by step. You can have a look at some samples of UI/UX design:

- Charity Donation App: <https://duchai.framer.website/Chado>
- Re-design Starbuck Ordering App: <https://duchai.framer.website/Redesign-Starbuck>

## 2.1. STANDARDIZING THE SCREEN CONFIGURATION

Please create and submit your screen configuration in a text file.

### ***Display***

Number of colors supported: 16,777,216 colors

Resolution: 1366 × 768 *pixels*

### ***Screen***

Location of standard buttons: At the bottom (vertically) and in the middle (horizontally) of the frame

Location of the messages: Starting from the top vertically and in the middle horizontally of the frame down to the bottom.

Display of the screen title: The title is located at the top of the frame in the middle.

Consistency in expression of alphanumeric numbers: comma for separator of thousand while strings only consist of characters, digits, commas, dots, spaces, underscores, and hyphen symbol.

### ***Control***

Size of the text: medium size (mostly 24px). Font: Segoe UI. Color: #000000

Input check process: Should check if it is empty or not. Next, check if the input is in the correct format or not

Sequence of moving the focus: There will be no stack frames. Each screen will be separated. However, the manual is considered a popup message, as the main screen cannot be operated while the manual screen is shown. After the opening screen, the app will start with splash screen, and then the first screen (home screen) will appear.

### ***Direct input from the keyboard***

There will be no shortcuts. There are back buttons to move back to the previous screen. Also, there is the close button “X” located at the title bar to the right to close the screen.

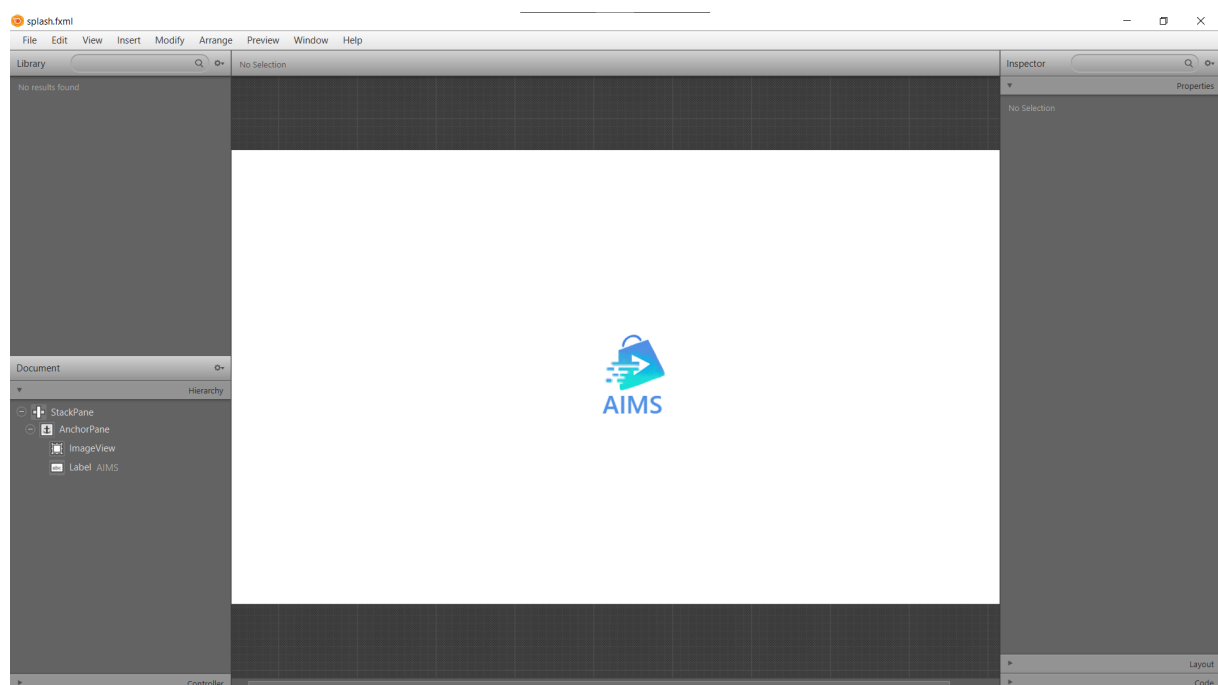
### ***Error***

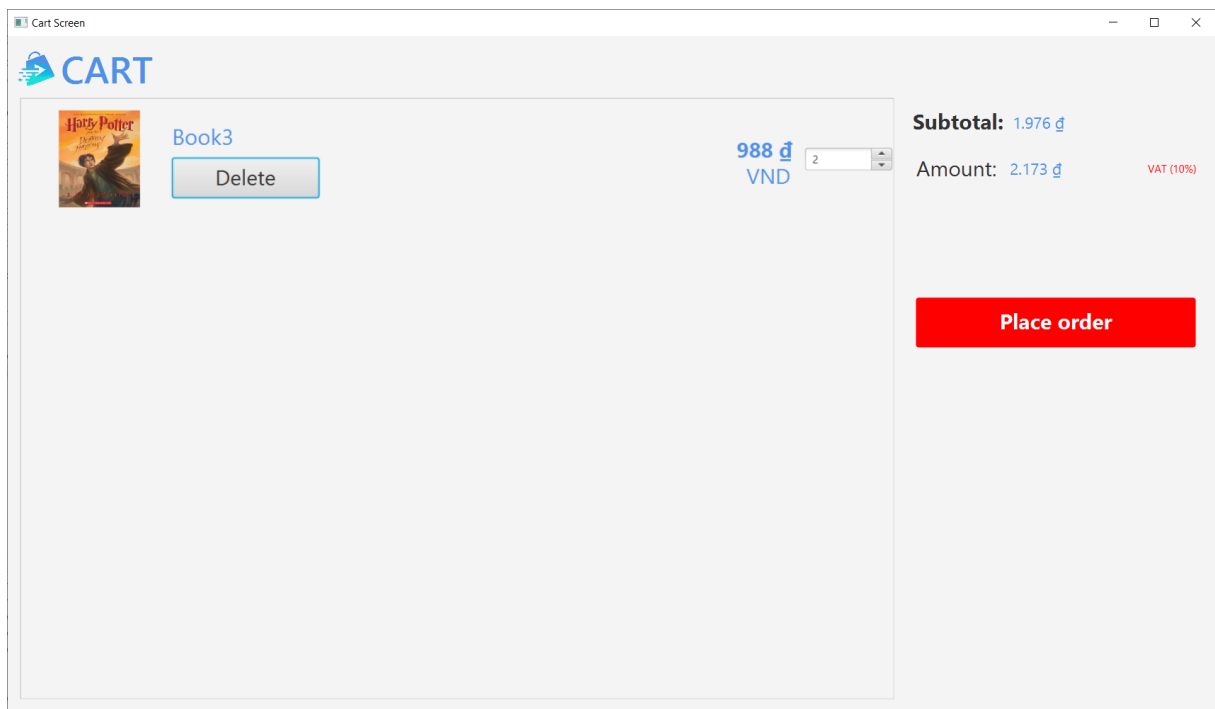
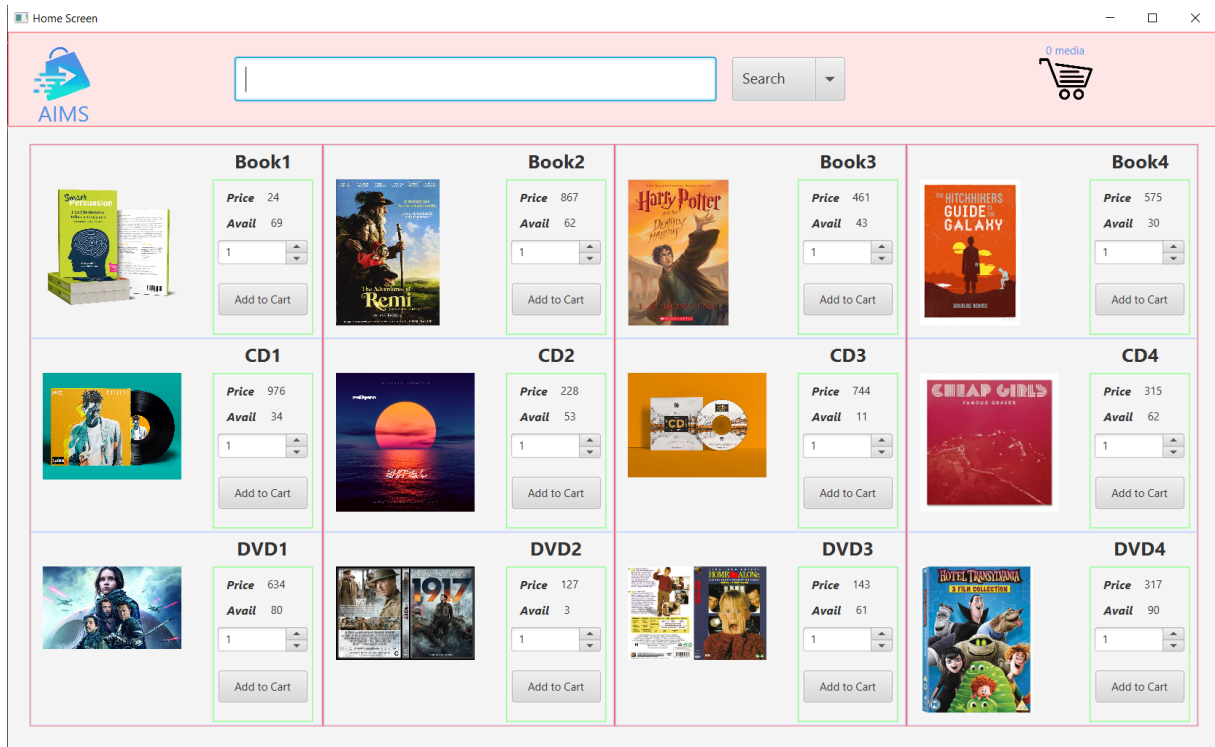
A message will be given to notify the users what is the problem.

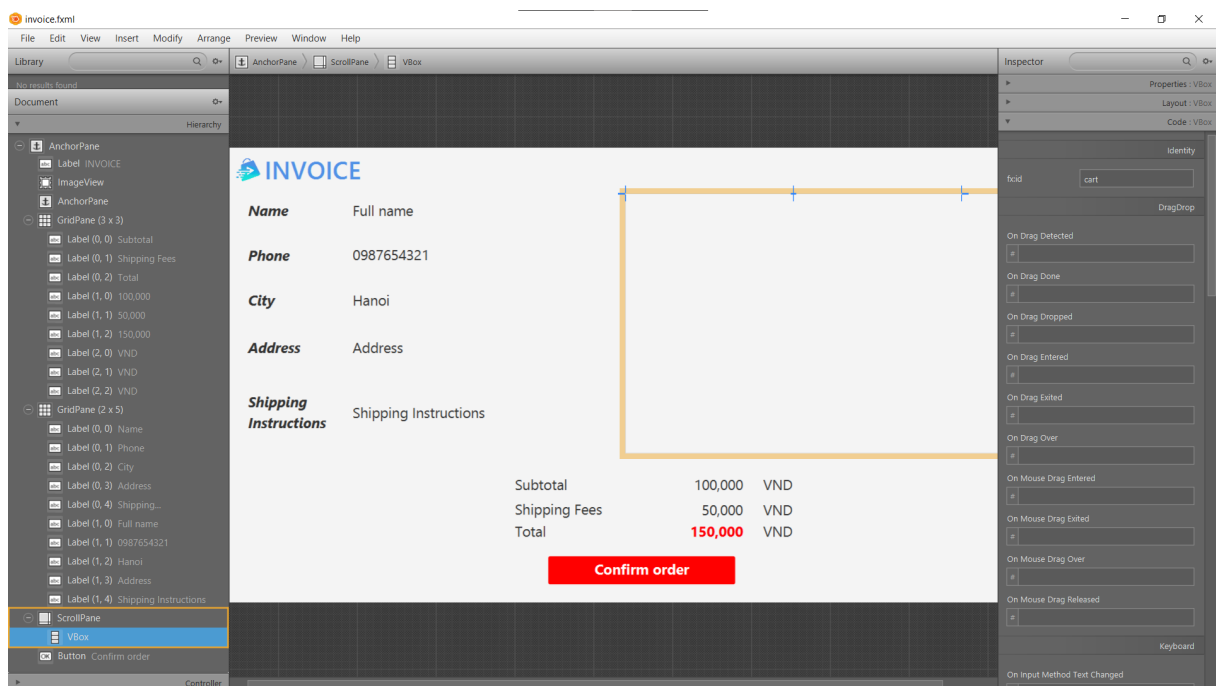
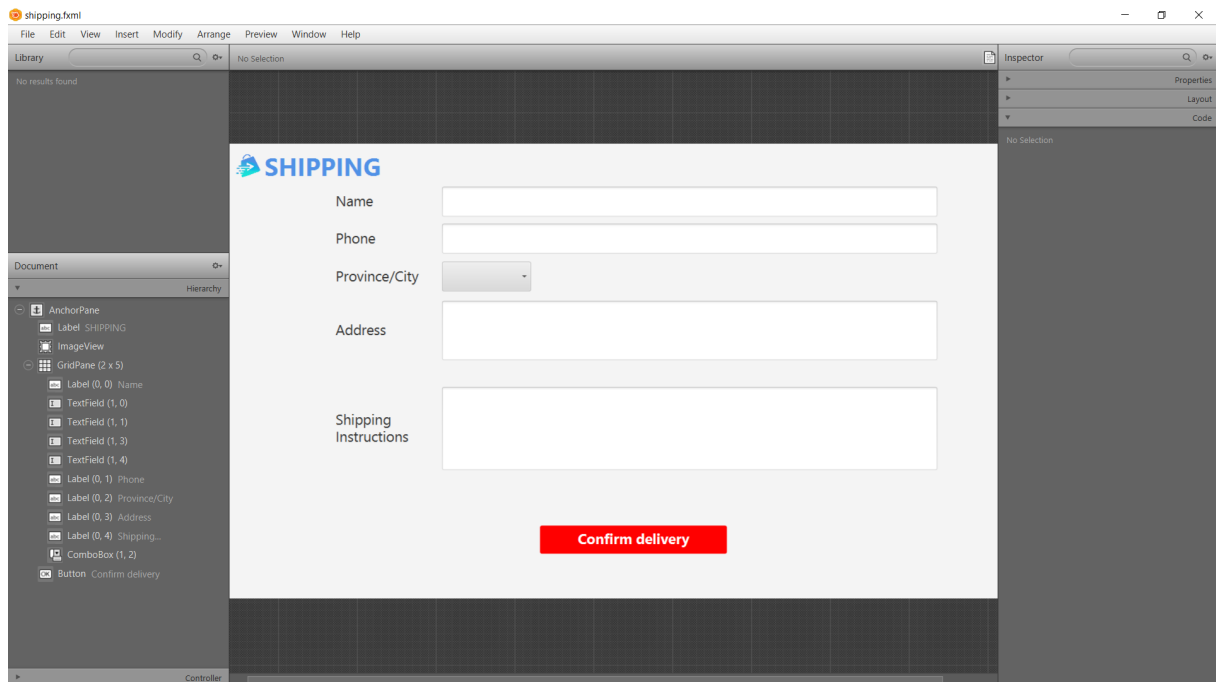
## **2.2. CREATING SCREEN IMAGES**

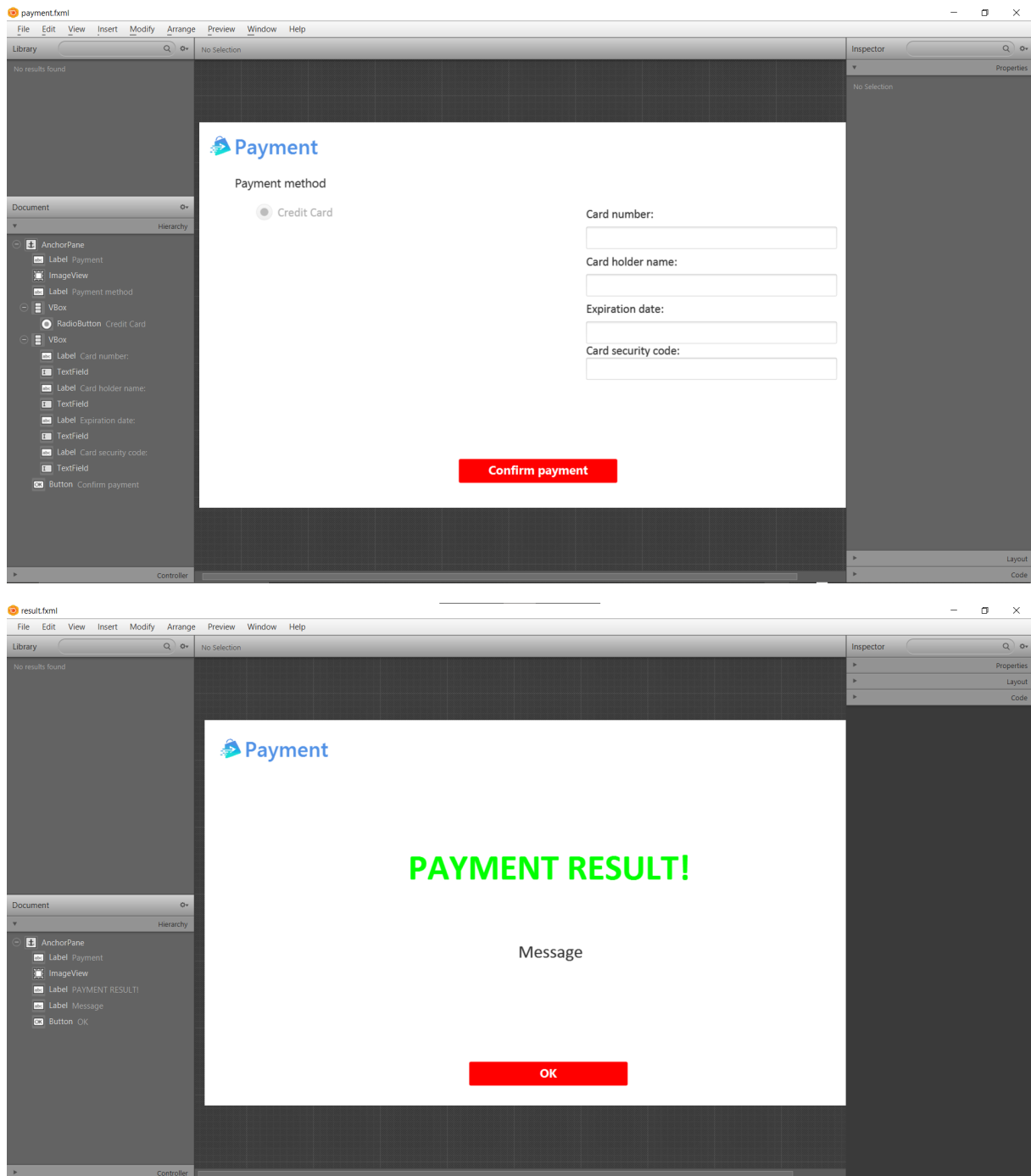
Creating screen images or mockup designs can be done by using applications such as <https://moqups.com/>, <http://draw.io/>, Figma, InVision Studio, Paint, Adobe Graphic design software, Adobe XD, or Scene Builder.

The following figures are made with Scene Builder, just for your reference for AIMS. You have to use figma to design for all screens for use cases related to place orders. Please export all screens to images, as well as figma link for your submissions.







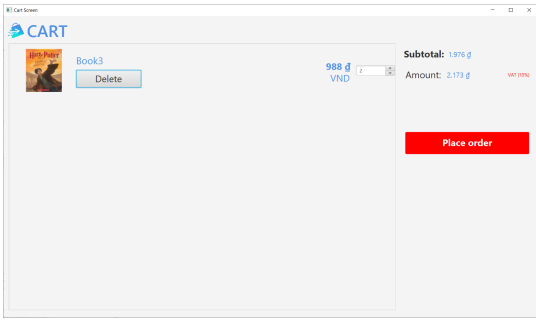


### 2.3. SCREEN TRANSITION DIAGRAM / USER FLOW

Creating screen transition diagram can be done by using <https://draw.io> or any drawing applications (even figma) as specified in the previous section.

## 2.4. SCREEN SPECIFICATION

### *Screen specification*

AIMS Software		Date of creation	Approved by	Reviewed by	Persion in charge
Screen specification	View cart screen	30/10/2020			Đỗ Minh Hiếu
		Control	Operation	Function	
		Area for displaying the subtotal	Initial	Display the subtotal	
		Area for display items in the cart	Initial	Display the media with the corresponding information	
		Place order button	Click	Display the Delivery form	
		Delete button	Click	Remove the item from the cart	

### *Defining the field attributes*

Screen name	View cart			
Item name	Number of digits (bytes)	Type	Field attribute	Remarks
Media title	50	Numeral	Blue	Left-justified
Price	20	Numeral	Blue	Right justified
Subtotal	20	Numeral	Blue	Left-justified

## 2.5. PLACE RUSH ORDER

**You are asked to design GUIs as above steps for the UC “Place Rush Order”.**