



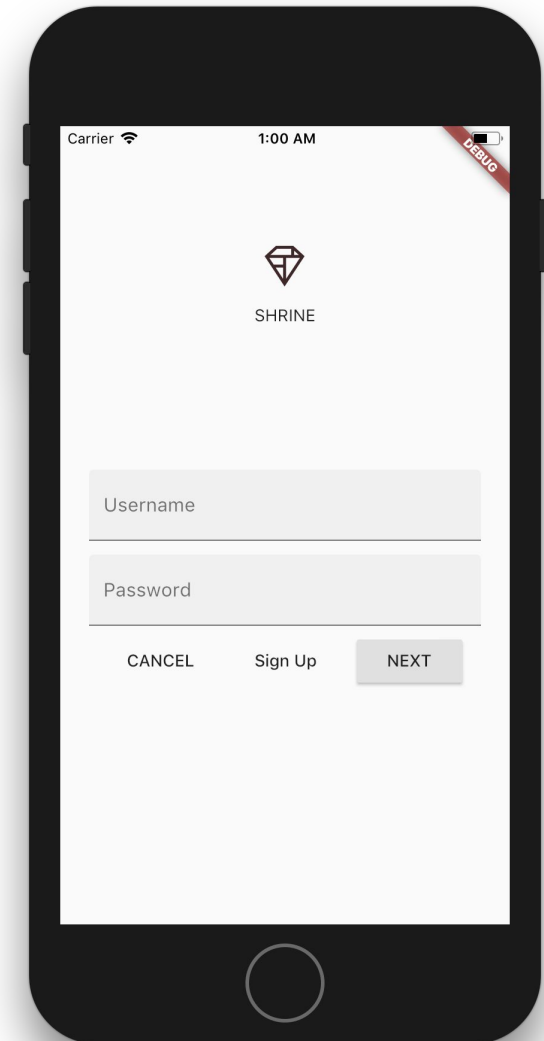
MIDTERM

Take home

Due: 2022.10.8 23:50

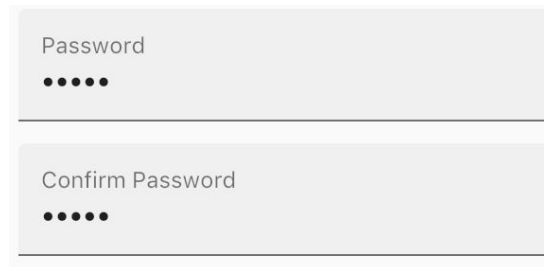
0. Sign In&Up

- If you share your source code, you will get **F** for this course.
- Flutter version should be higher than 3.0.
 - Follow the guideline on Hisnet(LMS) for submission. (file format)
 - Use MDC-102 based source code.
 - Overflow(or Error) must not be occurred.
- Sign In Page
 - Put the **Logo Image** on the top of the screen.
 - Create an **Username** and a **Password** text fields
 - Create **CANCEL, SIGN UP, NEXT** buttons (*sign up button should be placed between Cancel and Next.*)
 - The **Sign Up Button** has to navigate to the **Sign Up Page**.
 - The **Next Button** has to navigate to the **Main Page**.
 - If you press the **Cancel Button**, the two text fields (Username, Password) have to be cleared (refer to the screenshot).

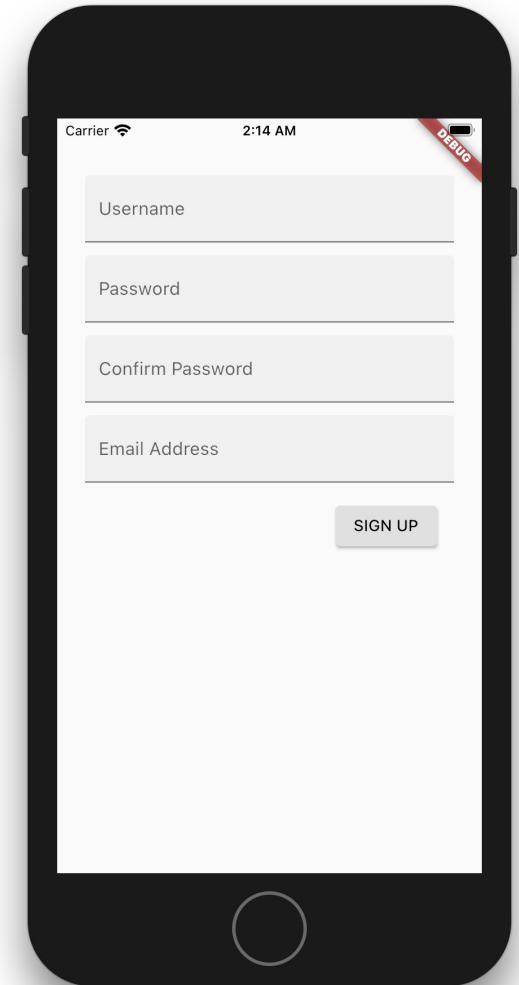


0. Sign In&Up

- Sign Up Page
 - *Create an Username, a Password, a Confirm Password, and an Email Address text field.*
 - The passwords must be written in **obscured** text. (***Password, Confirm Password***)
 - The **Sign Up Button** has to navigate to the **Sign In Page**.



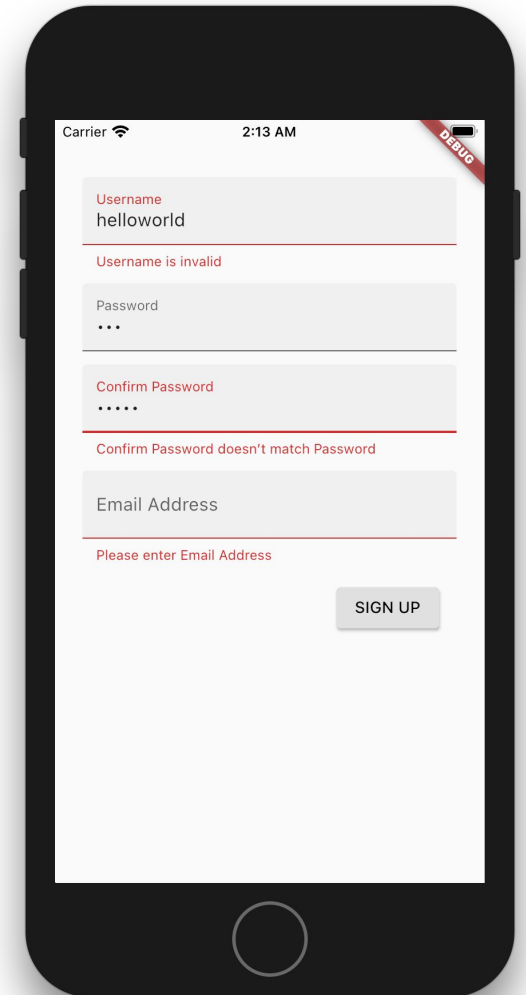
A close-up view of two text input fields. The top field is labeled 'Password' and contains five black dots. The bottom field is labeled 'Confirm Password' and also contains five black dots. Both fields have a light gray background and a thin border.



A mobile app interface for a sign-up page. At the top, the status bar shows 'Carrier', signal strength, '2:14 AM', and a battery icon. A red 'DEBUG' banner is in the top right corner. The main content area has four text input fields: 'Username', 'Password', 'Confirm Password', and 'Email Address'. Below these fields is a 'SIGN UP' button. The app is running on a black smartphone with a white home button at the bottom.

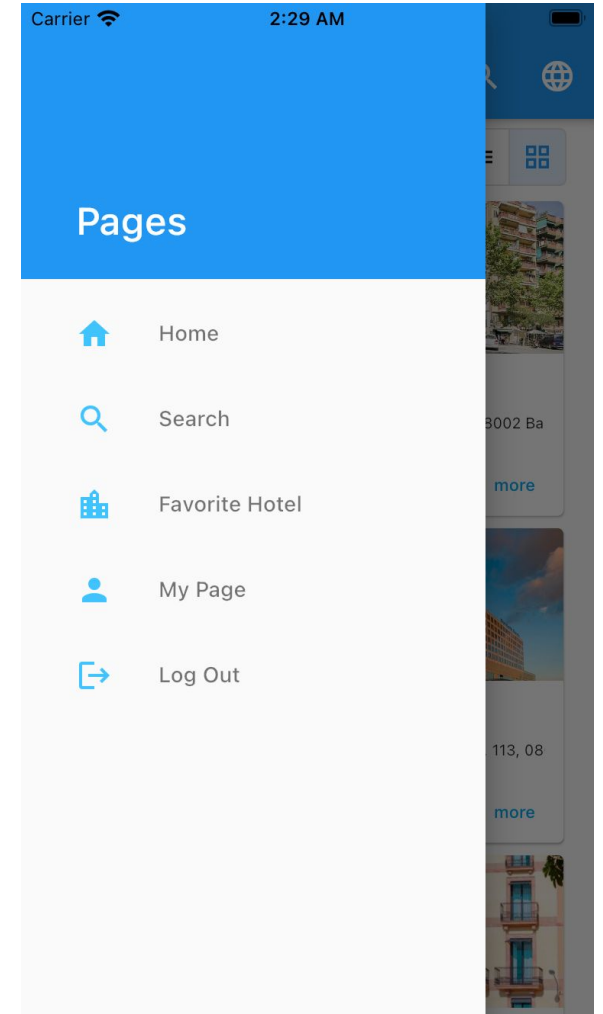
0. Sign In&Up

- Sign Up Page Validator
 - Each text field must have a validator that works when it is empty.
<https://flutter.io/cookbook/forms/validation/>
 - Username has to be a combination of at least 3 alphabet characters and at least 3 numbers.
(Validation Message: “Username is invalid”)
 - Password and Confirm Password have to match. Add validation message to Confirm Password textfield.
(Validation Message: “Confirm Password doesn’t match Password”)



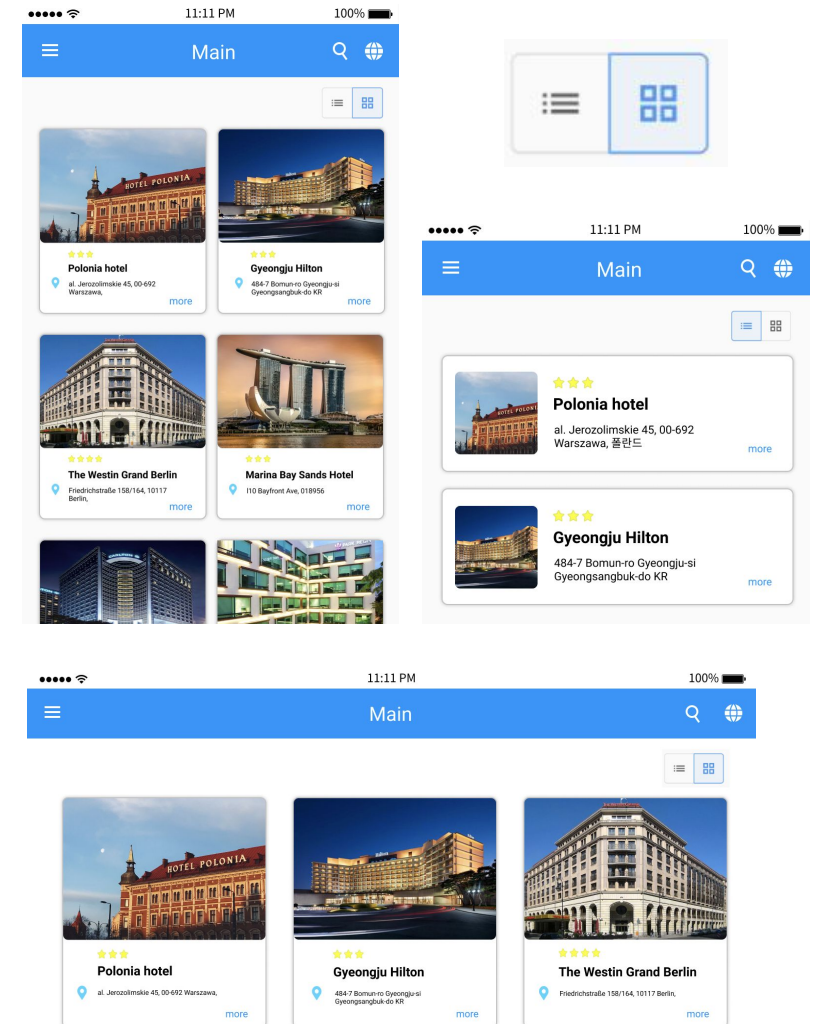
1. Drawer

- Drawer
 - Menu: Home, Search, Favorite Hotels, My page, Logout
 - All pages should be navigated by **Named Routes**
<https://flutter.io/cookbook/networking/named-routes/>
 - The **Menu Icons** should be placed in the leading position
(home, search, location_city, person, logout)
 - Logout button should navigate to **Sign In Page**



2. Home

- Use MDC-102 for layout
 - The App bar has three icon buttons(menu, search, language)
 - If you click the **hamburger menu**, a **Drawer** comes out
 - The **search icon** navigates to the **Search Page**(p.9)
 - The **language icon** navigates to '<https://www.handong.edu/>' using **url_launcher** (https://pub.dev/packages/url_launcher)
 - At the bottom right of the appBar, create a ToggleButton that changes the view of the hotel list (ListView \leftrightarrow GridView)
<https://material.io/components/buttons/flutter#toggle-button>
- Card Layout
 - (For GridView) **Two Columns** by default. When you turn the screen, the cards should be appeared in **three columns** (UI based on orientation) <https://flutter.io/cookbook/design/orientation/>
 - GridView Card Layout: Top: Hotel Image, Bottom: Stars & Hotel name & location
 - ListView Card Layout: Left: Hotel Image, Right: Stars & Hotel name & location
 - The “**more**” button navigates to the **Detail Page**.
 - There must be **at least 6 cards**



2. Home - Detail

■ Hotel detail Page

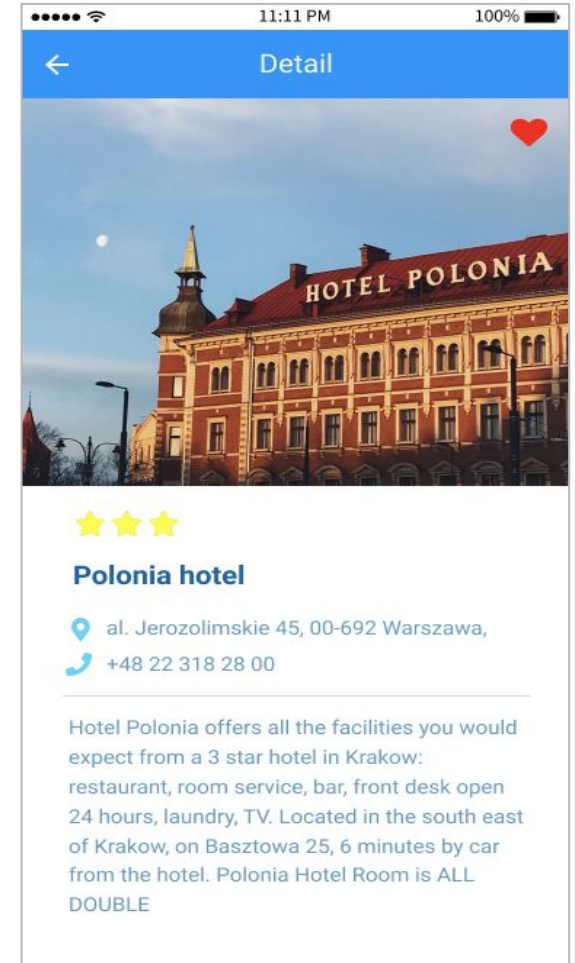
- The hotel image is displayed at the top of the page using **Hero Animation**. The image from Home Page, both grid and list views, directly moves to be displayed here.

<https://flutter.io/animations/hero-animations/>

- When navigated to detail page, "animated_text_kit" should be applied to hotel name. (Any type of animation is accepted. It just has to be noticeable.)

https://pub.dev/packages/animated_text_kit

- When navigating to the detail page, use the index value or the object of the hotel's main page. (Do not Hard Code!)
- Write the hotel description under the image. (Hotel stars, Hotel name, Location, Phone number, Description) (Icons: star, location_on, phone)

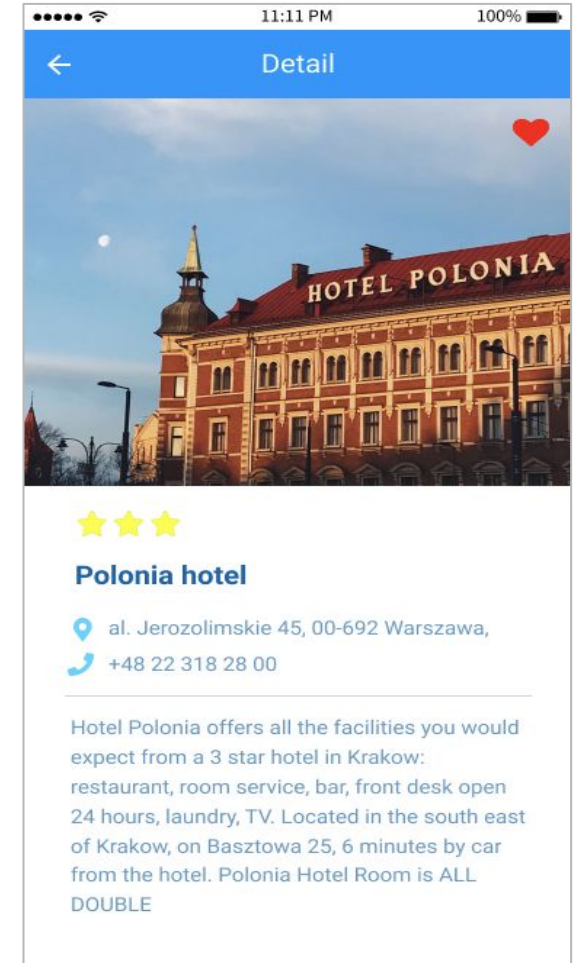


2. Home - Detail

■ Hotel detail Page

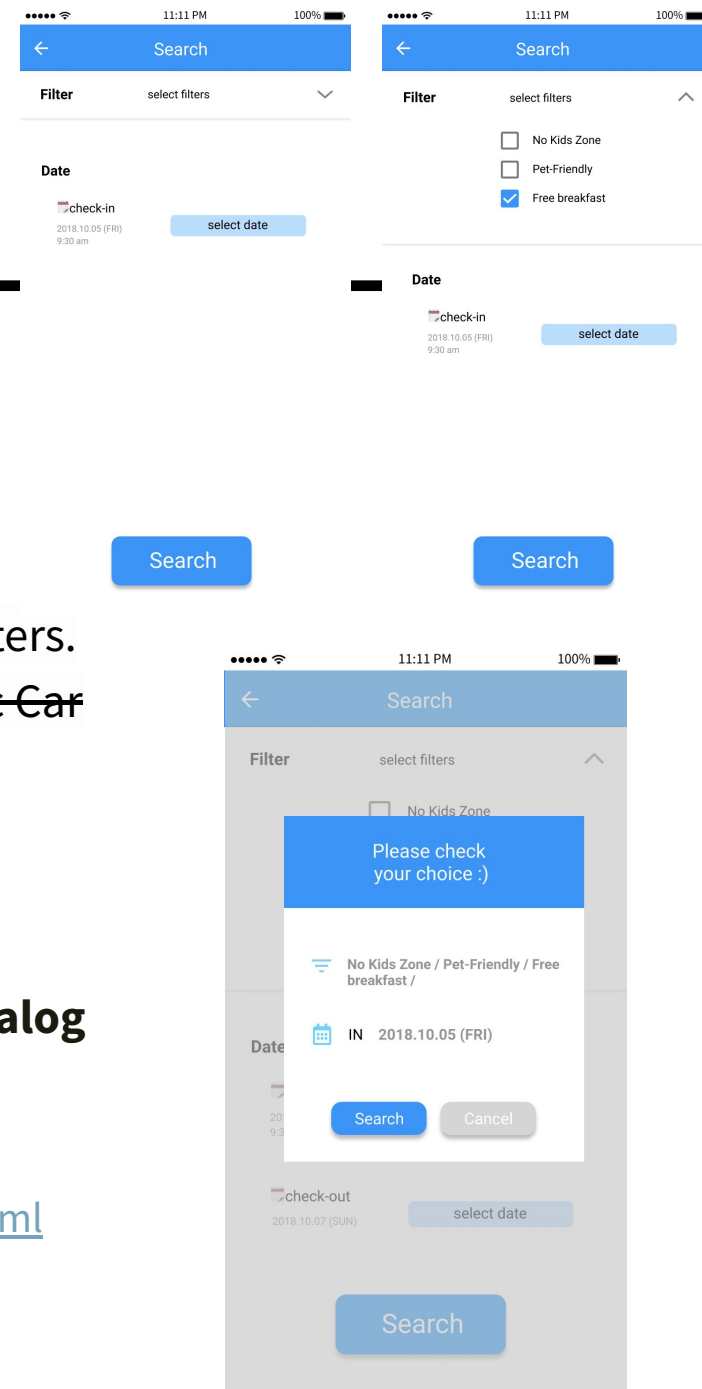
- Use **Stack** to display a heart icon on the right top of the photo. <https://api.flutter.dev/flutter/widgets/Overlay-class.html>
- ~~If you click the **IconButton**, a hotel is saved on the **favorite list**~~
- If you **Double Tap** the photo of the hotel, the heart icon turns to red and a the hotel should be saved on the **favorite list**. Use **InkWell** for this. <https://api.flutter.dev/flutter/material/InkWell-class.html>
- The saved state should be shown by the heart icon (Color: red, Icon: favorite or border_favorite)

❖ *The contents(such as Hotel stars, Hotel name, Location, Phone number, Description) of each hotel's description does not affect your score. Don't worry :)*

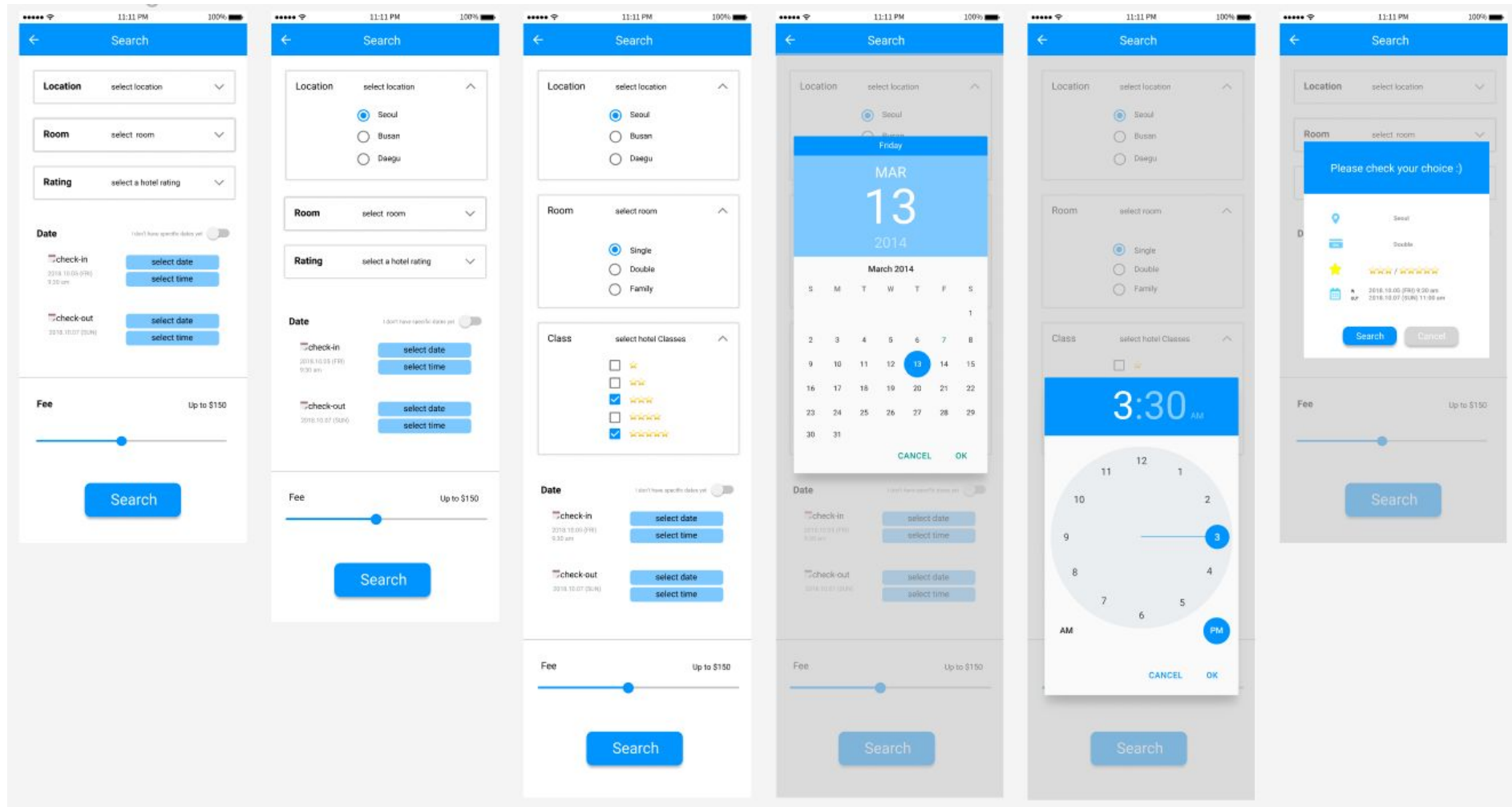


3. Search

- Add a **Search Menu** to the drawer
- Search Page
 - Use **ListView** and **ExpansionPanel** widget.
(**ExpansionPanel** is a child of the widget of **ListView**)
<https://api.flutter.dev/flutter/material/ExpansionPanel-class.html>
 - Filter section : Create **checkboxes** where you can select multiple filters.
(filters: No Kids Zone, Pet-Friendly, Free breakfast, ~~Free Wifi~~, ~~Electric Car Charging~~)
<https://api.flutter.dev/flutter/material/Checkbox-class.html>
 - Date section: Add a **DatePicker** to select check-in & ~~check-out~~ date.
<https://api.flutter.dev/flutter/material/showDatePicker.html>
 - If you click the Search button at the bottom of the page, an **Alert Dialog** should be popped.
 - In the dialog box, **all the contents** of the options you have chosen should appear. <https://api.flutter.dev/flutter/material/AlertDialog-class.html>

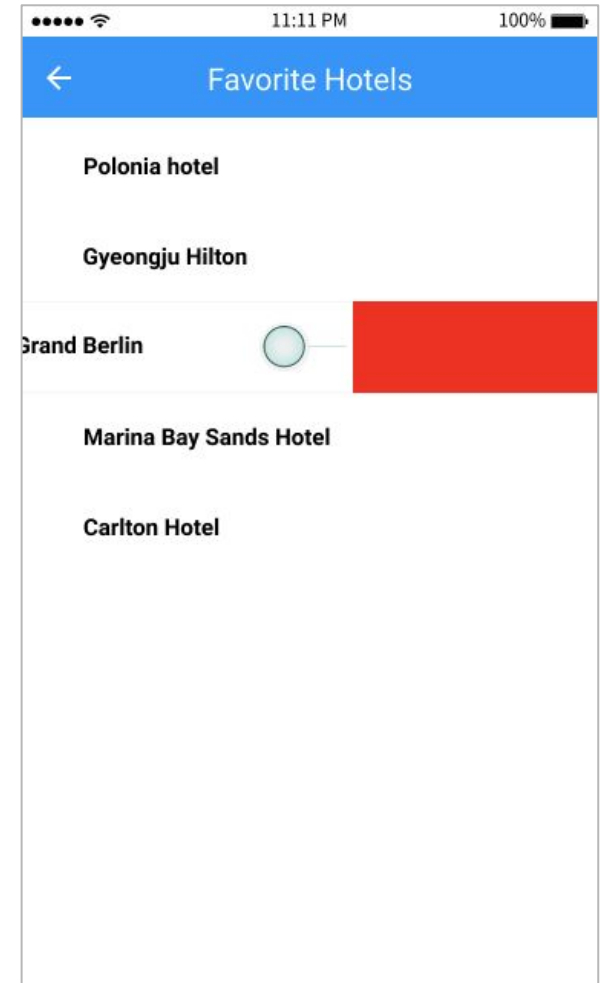


Search Page



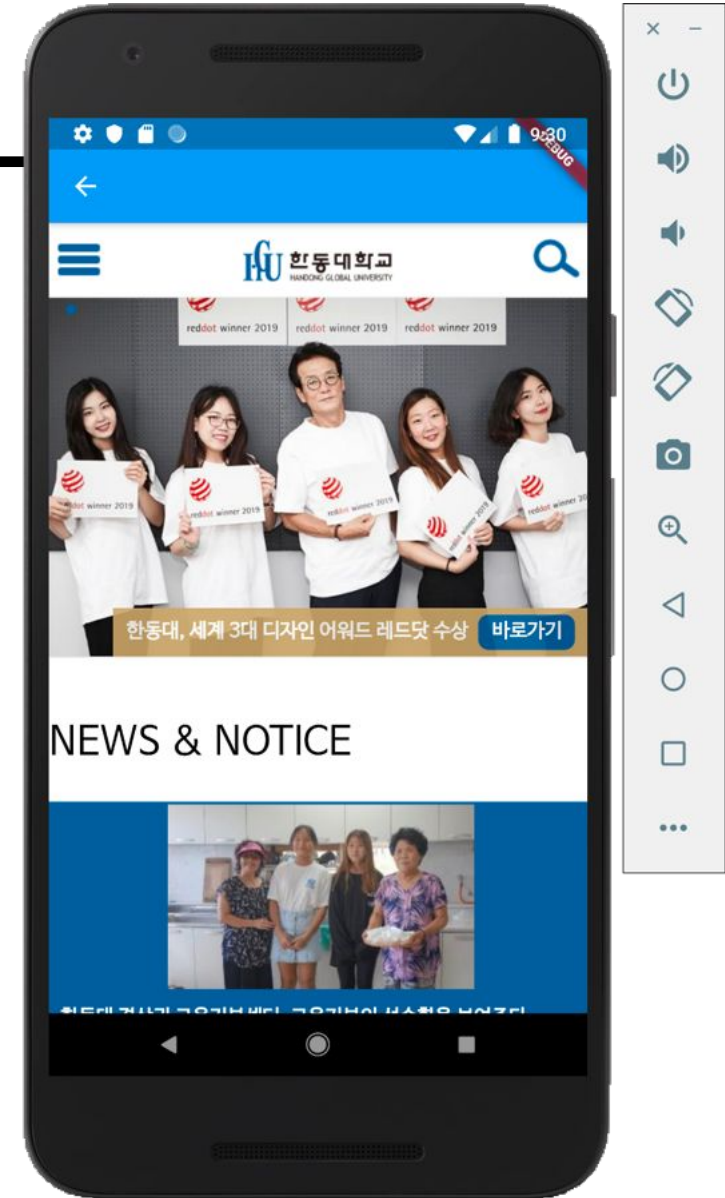
4. Favorite Hotels Page

- Add a Favorite Hotels Menu to the drawer
- Favorite Hotels Page
 - The **Saved Favorite Hotels** are listed using ListTile.
 - If you **swipe** an item, the item should be deleted
 - You can also use **flutter_slidable** package to delete your item.
https://pub.dev/packages/flutter_slidable



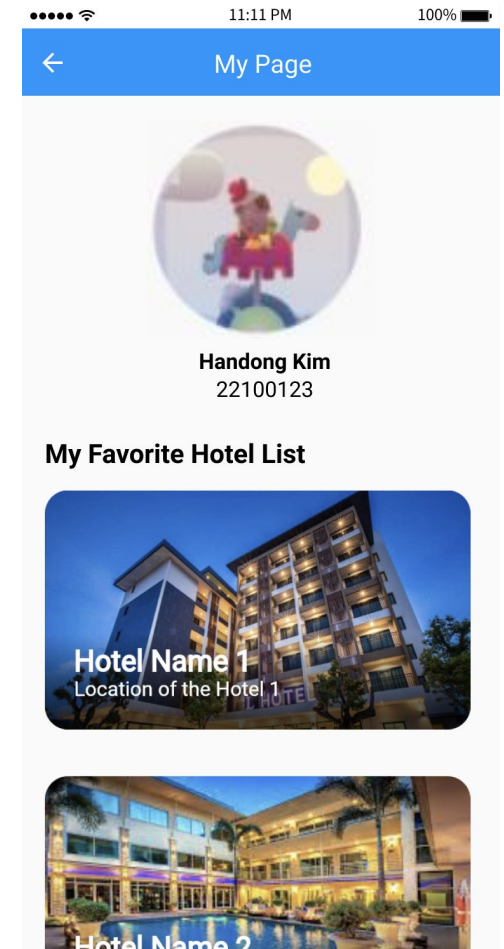
5. Website

- ~~Add Language Icon to the AppBar of Main Page~~
- ~~Website~~
 - ~~Use **WebView** Plugin~~
https://pub.dev/packages/webview_flutter
 - ~~When Clicking the language icon in **AppBar** of **Main Page**, go to the handong university home page.~~
<https://www.handong.edu/>



5. My Page

- Add a My Page Menu to the drawer
- Live Profile
 - Use **Lottie** for your live profile picture. (Any type of animation is accepted. It just has to be noticeable.)
(about Lottie, <https://pub.dev/packages/lottie>,
<https://lottiefiles.com/>)
 - Use the ClipOval widget to cut the live profile picture
picture(lottie) round.
<https://api.flutter.dev/flutter/widgets/ClipOval-class.html>
 - Put your name and student ID number below the profile. (This is considered as you signing to observe the Handong Honor Code.)
 - ~~— Using Switch widget, change the state of your live profile picture(lottie) → Left: Day(Icons.wb_sunny); Right: Night(Icons.nightlight_round)~~
<https://api.flutter.dev/flutter/material/Switch-class.html>



5. My Page

- Add a My Page Menu to the drawer
- My Page
 - ~~— Add **Auto-playing Carousel** in My Page~~
~~https://pub.dartlang.org/packages/carousel_slider~~
 - ~~— Fill the Carousel with “**Favorite**” Hotel Images~~
 - ~~— Use **Stack** to overlay “**Hotel name**” on the background images)~~
 - ~~— Make a list of the saved favorite hotels using **parallax scroll**~~ ~~<https://flutter.dev/docs/cookbook/effects/parallax-scrolling>~~
 - Make a list of the saved favorite hotels using **Card** and **ListView**.
 - In Card, use **Stack** for stacking favorite hotels’ image, name and location. Refer to the sample screen.
 - When clicking the Hotel Image, navigate to the detail page of each hotel using **InkWell**.
- ❖ *You don’t need to consider circle border in card, text size etc. Score only depends on hyphens.*

