

MOBILE APPLICATION DEVELOPMENT (MAD): LAB 4

OBJECTIVES

- Understanding Android Intent Filter
- Practice Activities

OBJECTIVE 1: Understanding Intent-Filter

- Intent Filter is way to sort out the intents, called using Implicit Intent.
- Structured description of Intent values to be matched.
- An Intent Filter can match against actions, categories, and data (either via its type, scheme, and/or path) in an Intent

Filter Rules

- An **Intent Filter** to match an Intent, three conditions must hold: the **action** and **category** must match, and the **data** (both the **data type** and **data scheme+authority+path** if specified) must match.
- **Action** matches if any of the given values match the Intent action; if the filter specifies no actions, then it will only match Intents that do not contain an action.
- **Categories** match if all of the categories in the Intent match categories given in the filter.

```
<intent-filter>
  <action android:name="android.intent.action.VIEW" />

  <category android:name="android.intent.category.DEFAULT" />

  <data android:scheme="http" />
</intent-filter>
```

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Objective 2: Practice Activities

Activity 1: Create a Login Page – Steps

- Add following components

| View | Text | Event |
|---------------|---|---|
| 2-3 Edittexts | Placeholder values (Email and Password) | none |
| Button | Login / Register | ValidateUser() |
| TextView | Not a member? Sign up now. / Already register! Login Me. | ChangeScreen() – This method will move user from login to register and from register to login. |

The image displays two side-by-side mobile application screen mockups. The left mockup features a teal background and contains three white input fields with placeholder text 'Email' and 'Password', followed by a light grey button labeled 'LOGIN'. Below the button is a white text label 'Not a member? Sign up now.'. The right mockup features a dark grey background and contains three dark grey input fields with placeholder text 'Fullname', 'Email', and 'Password', followed by a pink button labeled 'REGISTER'. Below the button is a white text label 'Already registred! Login Me.'.

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Activity 2: Friendsr App – Steps

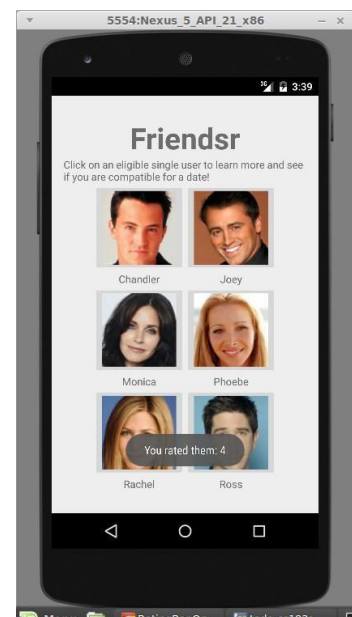
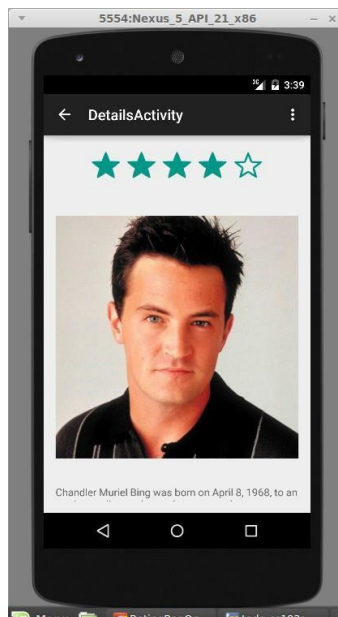
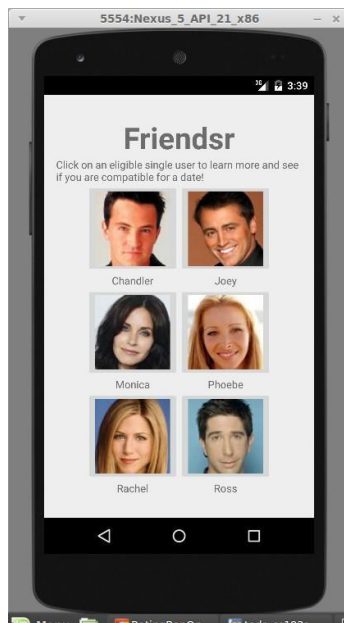
- Create a new project
- Add 6 imageViews and assign images accordingly
- Add Onclick event on all images.
- When clicked any image, use intent to move to second activity with more detail of the clicked person (Use imageView, RatingsBar and a TextView to show all data)
- Data is provided, use it appropriately.

Hint: Use following method to get data from array created in **strings.xml** file

```
<string-array name="tabs_names">
    <item>My Tab 1</item>
    <item>My Tab 2</item>
</string-array>
```

And then from your Activity you can get the reference like so:

```
String[] tab_names = getResources().getStringArray(R.array.tab_names);
String tabname1=tab_names[0]; //"My Tab 1"
```



Note: If you want to implement a rating bar of stars like the one shown in our screenshots, look into Android's RatingBar view class. You can place a RatingBar into a layout and interact with it in Java code by calling its getRating method.

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Activity 2:

"Mad Libs" are short stories that have blanks called **placeholders** to be filled in. In the non-computerized version of this game, one person asks a second person to fill in each of the placeholders without the second person knowing the overall story.

Once all placeholders are filled in, the second person is shown the resulting silly story. Write an Android app that reads in a Mad Lib from a text file in a specific format. The text file represents placeholders as tokens that start and end with < > brackets, like <adjective> or <proper-noun>. Your app reads the file, looks for any such placeholders, and prompts the user to replace them with specific words. Once the user has typed in replacements for all placeholders, the completed story is shown on the screen. The screenshots below indicate a possible flow of the UI for such an app.

Activities:

- Initial welcome screen, explaining the app
- 2nd game screen, where user has to fill the placeholders
- 3rd complete story screen.

