Lecture 3 - Mobile Interface Design Concepts and UI/UX Design Fundamentals

UI: user interface

- UI is a part of UX
- UI is everything that the user can see and interact with

UI elements

In android studio those UI elements are exists in palette

Through "code" button we can go to xml code

When we want to get the design we have to press the "design" button

To view design and code together we have to press "split" button

- Typefaces
- Layout
- Visual design
- User control
- Content
- Color
- Input/output devices
- Action button

UX: user experience

- User feeling about the application before, during and after using application
  To have a good user experience

  - There should have good user experience concept
  - Good set of principles
  - Good UI elements

- If we give above requirements we can give good user experience through
  - Wireframes
  - Prototyping
  - User testing

Mobile UI Components

  - Layouts
  - Notification
  - Menus

- o Dialogs
- o Toast
- o Other common elements (Buttons, Text fields and etc,)
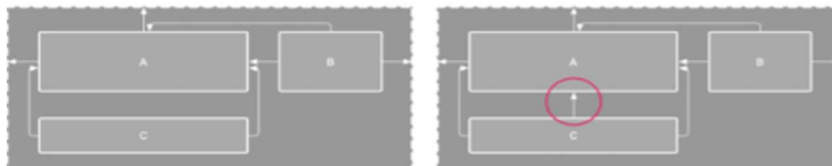
Layouts

- This defines the structure for a user interface in your application
- There are types of layouts
  - o Linear layout
    - In this layout we can add UI elements one by one after the other
    - We can use this horizontally and vertically orientations
    - We cannot put UI elements in same column/line

  - o Relative layout
    - Here we can add sibling elements
    - we can add elements in one line but compared to the sibling elements
    - We have to position each UI elements comparing to sibling/parent elements

  - o Constraint layout
    - In this layout we can place element in exact position
    - Very flexible than relative layout

  - o Adapter View
  - o Grid View
  - o Table Layout
  - o Absolute Layout
  - o Frame Layout

Notifications

- A message displays outside the app's UI to provide the user
- We can use them for
  - Reminders
  - Communication with other people
  - Timely information from the app

Dialog boxes

- This can use to ask a question from user
- There are few types
  - AlertDialog
  - DatePickerDialog / TImePickerDialog
- They are small screened
- They are coming in front of current layout

Menus

- Option menu
- Context menu
- Popup menu
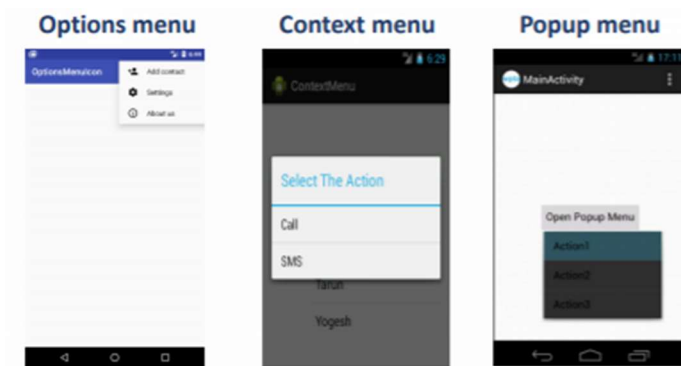
Toasts

- Short message that comes below of the screen for a short period

Mobile UI frameworks

- This framework must arrange all the requirements in a small screen in an attractive way

Principles of mobile user interface design

- Mobile Mindset

- Be focused (there should be a way to focus necessary things when applying in small screen)
- Content should be brief
- Content should be unique (In order to have a competition with market our application should be unique)
- Be charming (application should be user friendly, clear)
- Be considerate (It should consider about different user ranges and different parameters of the users)

- Mobile contexts
  - Bored (UI should be not bored)
  - Busy (According to the topic we must design busy background)
  - Lost

- Global Guidelines
  - Responsiveness (If user enter invalid values application must know to give invalid message)
  - Polish (design should give the perfect idea for user)
  - Thumbs (Design should be easy for use through thumb)
  - Target (How UI elements are place relative to each other)
  - Content (content should be familiar to the user)
  - Controls
  - Strolling

- Navigation models
  - None (no navigations applied)
  - Tab bar (3 to 6 tab bars (not more than 6))
  - Drill down

- User inputs
  - Keyboard variations
  - Auto correction
  - Device orientation

- Gestures
  When applying gestures better to notify user before apply
  - Invisible
  - Two hands
  - Nice to have
  - No replacement

- Orientation
  - Vertical/horizontal
- Communication

- o Provide feedback
- o Model alerts
- o Confirmation

- Launching
- First impression
  - o Icon
  - o First launch

Mobile UI Evaluation

- Things about the colors, themes, styles must be evaluated
- Progress indications, menu bars, how they validate among each other and overall responsiveness should be evaluated
- This can be done by several people
  - o Expertise
  - o Lab test (development team)
  - o Selected users

- If those evaluations done by labs they use some evaluation tools
  - o Userltics (support only for apple devices)
  - o Applause (support both android and ios)
  - o Loop 11 (how many time users will get to take its first link and it is informing about common navigation parts)
  - o Userzoom (it can detect virtual expressions of each user)
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