

Android Course Outline

1. Java Concepts
 - 1.1. Basic Java Application
 - 1.1.1. Creating application in packages
 - 1.1.2. Java variables
 - 1.1.3. Java conditional and loops
 - 1.1.4. Java Arrays
 - 1.1.5. Java ArrayLists
2. Versioning
 - 2.1. Git
 - 2.1.1. Installation
 - 2.1.2. Create a new repository
 - 2.1.3. Cloning a repository
 - 2.1.4. Add and Commit
 - 2.1.5. Pushing Changes
 - 2.1.6. Pulling changes
 - 2.1.7. .gitignore
 - 2.1.8. Push code
 - 2.2. Bitbucket - Overview
3. Activities, Fragments and Intents
 - 3.1. Understanding activities
 - 3.1.1. layouts
 - 3.1.2. defining them in manifest
 - 3.2. Linking activities using intents
 - 3.3. Passing data between activities
 - 3.4. Using shared preferences
 - 3.5. Fragments
 - 3.6. Calling Built-in Applications using intents
 - 3.7. Display notifications
 - 3.8. Example
 - 3.9. Lab:
4. Android User Interface
 - 4.1. View groups
 - 4.1.1. LinearLayout
 - 4.1.2. RelativeLayout
 - 4.1.3. ScrollView
 - 4.1.4. ListView
 - 4.1.4.1. Basic
 - 4.1.4.2. ListView with custom layout
 - 4.2. Views
 - 4.2.1. TextView
 - 4.2.2. EditText

- 4.2.3. Button
 - 4.2.4. ImageView
 - 4.3. Menu
 - 4.3.1. Option menu
 - 4.3.2. Context menu
 - 4.3.3. sub menu
 - 4.4. ListView
 - 4.5. GridView
 - 4.6. Design Mockups
 - 4.7. Examples
 - 4.8. Lab:
- 5. Database and data persistence
 - 5.1. Introducing SQLite
 - 5.2. SQLiteOpenHelper and creating a database
 - 5.3. Opening and closing a database
 - 5.4. Working with cursors; insert, update, delete
 - 5.5. Example
 - 5.6. Lab:
- 6. Content Providers
- 7. Advanced User Interface
- 8. Network Communication
 - 8.1. JSON based Web Services/API
 - 8.2. Android Volley Library
 - 8.3. Other Libraries - Overview
 - 8.3.1. ion
 - 8.3.2. VolleyPlus
 - 8.3.3. Android Async Http
 - 8.4. JSON
 - 8.4.1. JSONArray
 - 8.4.2. JSONObject
 - 8.4.3. Consuming JSON
 - 8.5. Saving data in SQLite
 - 8.6. Using Loader Managers to display saved data
- 9. Publishing Android App
 - 9.1. Signing APK using Android Studio
 - 9.2. Uploading APK to Play Store