0wl-M :A MATERIAL DESIGN STUDY APP

ABSTRACT:

A project that demonstrates the use of Android Jetpack Compose to build a UI for a Owl-M: a material design study app. Owl-M app is a sample project built using the Android Compose UI toolkit. A Compose implementation of the Owl Material study.

INTRODUCTION:

Material Design is an Android-oriented design language created by Google, supporting onscreen touch experiences via cue-rich features and natural motions that mimic real-world objects. Designers optimize users' experience with 3D effects, realistic lighting and animation features in immersive, platform-consistent GUIs.

BUILDING APPLICATION UI:

Material design is a comprehensive guide for visual, motion, and interaction design across platforms and devices. To use material design in your Android apps, follow the guidelines defined in the material design specification and use the new components and styles available in the material design support library.

COMPONENTS IN MATERIAL DESIGN:

They can be organized into five categories based on their purpose:

- Action
- containment
- navigation
- selection
- text input

PRINCIPLES:

The three main principles of the material design are being bold, depictive and purposefulness. Material design is undoubtedly a design made with a minimalistic approach. In simple words, you aren't required to employ numerous designing tools and style preferences.

ELEMENTS OF DESIGN:

Design elements are the basic units of any visual design which form its structure and convey visual messages. The elements of design are line, shape, form, space, texture, tone (or value) and color, "These elements are the materials from which all designs are built."

CREATE THE PACKAGE MANIFEST:

To create the package manifest

1.   Create a directory for the bootstrapper package. This example uses *C:\package*.

2.   Create a subdirectory with the name of the locale, such as *en* for English.

3.   In Visual Studio, create an XML file that is named *package.xml*, and save it to the *C:\package\en* folder.

4.   Add XML to list the name of the bootstrapper package, the culture for this localized package manifest, and the optional license agreement. The following XML uses the
variables DisplayName and Culture, which are defined in a later element.

XML

```xml
<Package

xmlns="http://schemas.microsoft.com/developer/2004/01/bootstrapper"
    Name="DisplayName"
    Culture="Culture"
    LicenseAgreement="eula.txt">
```

5.   Add XML to list all the files that are in the locale-specific directory. The following XML uses a file that is named *eula.txt* that is applicable for the **en** locale.

XMLCopy

```xml
<PackageFiles>
  <PackageFile Name="eula.txt"/>
</PackageFiles>
```

6.   Add XML to define localizable strings for the bootstrapper package. The following XML adds error strings for the **en** locale.

XMLCopy

```xml
  <Strings>
    <String Name="DisplayName">Custom Bootstrapper
Package</String>
    <String Name="CultureName">en</String>
    <String Name="NotAnAdmin">You must be an administrator to
install
this package.</String>
```

```xml
    <String Name="GeneralFailure">A general error has occurred while
installing this package.</String>
</Strings>
```

7.   Copy the *C:\package* folder to the Visual Studio bootstrapper directory. For Visual Studio 2010, this is the *\Program Files\Microsoft SDKs\Windows\v7.0A\Bootstrapper\Packages* directory.

Example:

The package manifest contains locale-specific information, such as error messages, software license terms, and language packs.
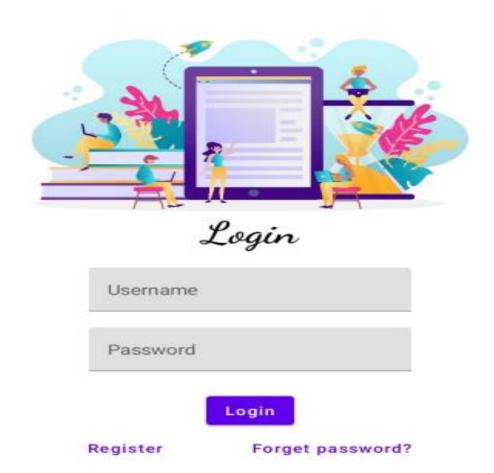
XML

```xml
<?xml version="1.0" encoding="utf-8" ?>
<Package

xmlns="http://schemas.microsoft.com/developer/2004/01/bootstrapper"
  Name="DisplayName"
  Culture="Culture"
  LicenseAgreement="eula.txt">

  <PackageFiles>
    <PackageFile Name="eula.txt"/>
  </PackageFiles>

  <Strings>
    <String Name="DisplayName">Custom Bootstrapper
Package</String>
    <String Name="Culture">en</String>
    <String Name="NotAnAdmin">You must be an administrator to
install this package.</String>
    <String Name="GeneralFailure">A general error has occurred while
installing this package.</String>
  </Strings>
</Package>
```

OUTPUT:

Final Output of the Application :

LOGIN PAGE:

REGISTER PAGE:

Register

Username

Email

Password

Register

Have an account? Log in

MAIN PAGE:

CONCLUSION:

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