Android Interview Project

Overview

We have set up a basic Java project in Eclipse, that uses libgdx (the graphics library we use for our Android/Desktop client-work).

It launches a blank white window, and your task will be to add as many of the features below as you can in the time you have.

Direction is intentionally vague, and scouring the internet for answers will be required, and is encouraged. We would like to see how you adapt to an unfamiliar project and toolset, you won't necessarily be expected to complete the entire task.

You will be asked to take the empty project, add some UI features, use and research libgdx, and begin work on a simple *Connect 4* game. The images in the task are mockups, and our assets are basic, your version may be better - we include them only as a guide.

The things we are looking for:

- Completed features
- 'Proper' use of any libraries
- Code reusability and structure
- Quality (documentation, formatting, etc.)

These links will be useful, to get you started working with libgdx.

https://code.google.com/p/libgdx/wiki/TableOfContents

https://code.google.com/p/libgdx/wiki/scene2dui

https://code.google.com/p/libgdx/wiki/SpriteBatch

https://code.google.com/p/libgdx/wiki/AssetManager

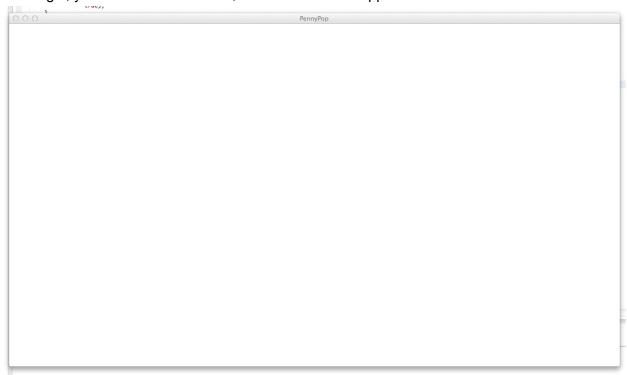
Functionality

Project set up

Set up your Eclipse environment, and import our project (named 'project'), which you can download from here: http://pennypop-public.s3.amazonaws.com/interview/clientproject.zip

There are assets included in the /project/assets/ directory; several images and a font. You may use your own if you wish.

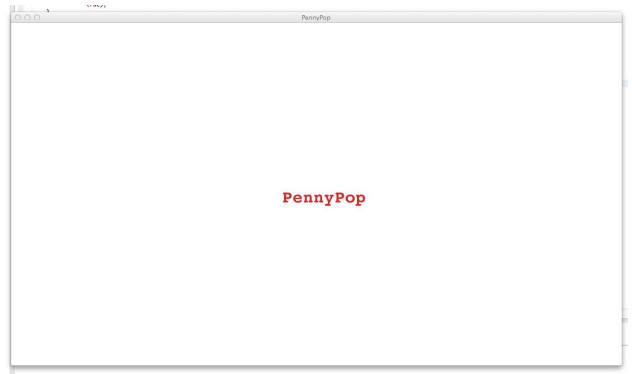
Running it, you should have a blank, white window that appears like this:



Adding UI

 $\label{lem:Add} \mbox{Add a simple label to the screen (using the font in the assets)}.$

Hint: You will need to color the text, the asset is white.



Add a button to the screen, that plays a sound. The audio file + button image are included.



:DCalling an API

Add a button which calls an API, and displays the information on screen.

URL:

 $\frac{\text{http://api.openweathermap.org/data/2.5/weather?q=San}{20} Francisco, US\&appid=2e32d2b4b825464ec8c677a49}{531e9ae}$



The Game

For this part, you will need a new Screen implementation, GameScreen. This will contain our Connect 4 game. You should add a button to the MainScreen that will show your game. When the screen shows, the game should start. When the game is complete, it should display the winner, and a click should take us back to the main screen.

It should be a simple 2 player game. If you have time to add AI, that is a bonus. When designing your code, you should assume that rules may change (board size, line size required to win), or that AI may be implemented in the future.

