PROJECT **4.1.3**

Walls, Characters, and Doodads

In Activity 4.1.2 Level Loading, you modified the Emu On The Loose game so that it could dynamically load text data containing information about the layout of floor tiles. Now, you will practice what you've learned about file operations and `ArrayLists` to add some new layers to your game. As you work on this project, you will add walls, characters, and "doodads" (objects like stools, cubbies, and desks) to the game.

Materials

- Computer with Android™ Studio
- Android™ tablet and USB cable, or emulator

Procedure

Part I: Add More Layers

1. Form pairs or teams as instructed by your teacher.

2. Get a copy of the *4.1.3EmuOnTheLoose* source files from your teacher. Copy or extract the files to a *413_EmuOnTheLoose* folder in your *AndroidProjects* folder.

3. Extract the compressed folder.

4. Choose one of the following methods to upgrade Emu On The Loose for this activity. If you were unable to complete the previous activity, choose method two.

   - **Method One**: Use the Java files contained in *4.1.3EmuOnTheLoose* source files to overwrite the files of the same name in your project from *Activity 4.1.2*.

   - **Method Two**: Use the Java files contained in *4.1.3EmuOnTheLoose* source files to start a new LibGDX project. Follow steps 6-18 in *Activity 4.1.1 LibGDX Setup Part II Import Project*.

5 Add methods to your existing classes to place:

- doodads (objects like tables, cubbies, and stools) over the floor tiles

- wall tiles

- characters in their starting locations

6 When you are finished, run your app.

You should see a still image like the example below.
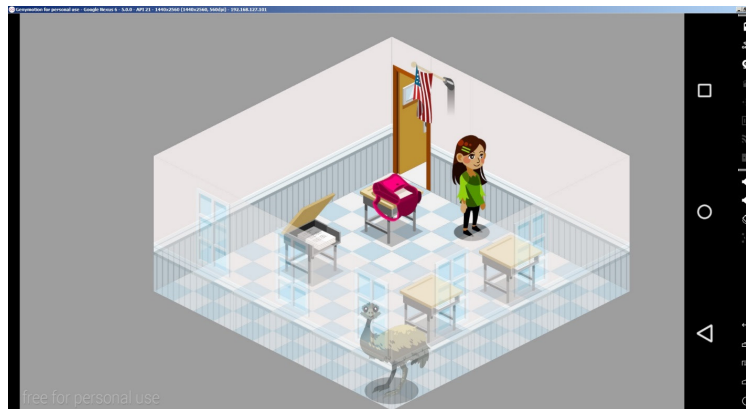
CONCLUSION

1. Describe an alternate design approach to the way that you collected and displayed data about the walls in this app.