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**Work in Progress Report 3**

**Major developments/breakthroughs(reference specific code please):**

* project is now able to push & pull to/from Github repository inside of Android Studio
* whole project is now 100% accessible by github (e.g., documents folder and branches for each scratch program)
* project is now divided up into separate classes
* vertically scrolling background has been fixed and is now able to fit to the screen
* collision detection also fully implemented and working now

**Major Challenges/setbacks (reference specific code please):**

* process of creating branches from android studio that are dedicated to scratch programs (was solved through master Jose’s help)
* collision detection in current program is still “inefficient” (currently working on learning Box2D and how its collision detection works)

**Any modifications to your specifications/release schedule:**

* nothing in particular

**Description of your scratch/test program:**

**Describe the generic concept you needed to test out:**

ScratchButton: tested out the concept of using buttons with a custom image and using a texture packer to pack the different button states into one file

ScratchBox2D(Box2d.java class in that branch): learning Box2D basics

**Source any web site/book that helped you with that concept:**

ScratchButton

* Matt Brock helped out
* <http://stackoverflow.com/questions/21488311/libgdx-how-to-create-a-button>
* <http://gamedev.stackexchange.com/questions/60123/registering-inputlistener-in-libgdx>

ScratchBox2D

* Jose Rivas helped out
* <http://www.gamefromscratch.com/post/2014/09/10/LibGDX-Tutorial-13-Physics-with-Box2D-Part-2-Force-Impulses-and-Torque.aspx>
* <https://github.com/libgdx/libgdx/wiki/box2d#sprites-and-bodies>

**Describe the code and the lesson that you learned from it:**

ScratchButton

* a button is displayed and through a series of actions, a customizable image can be given the button functionality
* when the button is pressed it performs a certain function (displays an image in this case)

ScratchBox2D

* learned some basics Box2D
* what worlds, bodies, and fixtures are

**Describe any challenges that you enjoyed in integrating this scratch code into your major project:**

* ideas learned from “ScratchButton” will be implemented at a later date (e.g., when creating main menu or power up button)
* ideas learned from “ScratchBox2D” will be implemented at a later date to fix collision detection (and for other cool features)