

## Assignment 4 – Doge Clicker

### Goals

- Recognize and use good UI conventions.
- Enable basic persistent data.
- Most of Doge Clicker is already complete. Your goal is to redesign Doge Clicker such that a user is not confused while playing. You must also make it so that rotating the device will not reset the game.

### Required naming convention *(replace # with the current assignment number)*

- **Application Name**
  - A#
- **Company Domain**
  - Firstname.lastname.itp341
- **Package Name**
  - Itp341.lastname.firstname.A#

### Background

- Doge Clicker is a game based off the “clicker” style of game that gained popularity in 2013. The most popular example at the time was “[Cookie Clicker](#)” and various games continue to incorporate the same themes today.
- The objective of “clicker” games is simply to get as many of something as possible. For Doge Clicker, we want as many Doges as possible. This is usually done by clicking/pressing something (in Doge Clicker, this image is Rob’s dog, Mocha).
- “Clicker” games give the option of spending the desired item to unlock some beneficial trait. For Doge Clicker, you can spend Doges on Shoes, Treats, Fire Hydrants, and Humans, each of which will “attract” more Doges per press. Normally, “buying” one of these will increase the price of obtaining the next one.
- We suggest that you **play the game** at least once before trying to redesign it. In this game, **there is no end**, so stop when you get bored. Brownie points if you post your score on Piazza before you stop. You lose brownie points if you change the game code to have maximum Doges.

### Requirements

- Create new Android Application Project
  - Min SDK: API 25
  - Follow default prompt, but make sure to choose **Empty Activity**.
- UI
  - Update the layout files and make it visually appealing (see figure 1 and 2 for example of what NOT to do).

- In designing, follow the rules in the Android Design Guide. This includes height of widgets, spacing, padding, etc.  
<http://developer.android.com/design/style/metrics-grids.html>
- **Do not** rename or remove views.
- Note: you **need** to make both landscape and portrait layout files look good.
- Code
  - Persist data when screen rotates using **saveInstanceState**.
  - Add a button that makes a toast showing the contribution of shoes, treats, humans, and hydrants to each press (see figure 3).

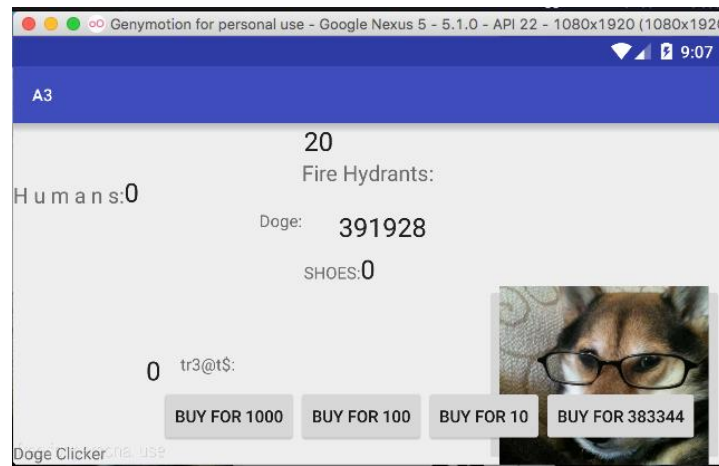
## Deliverables

1. A compressed file containing your app. Follow the guidelines for full credit.  
Here are the instructions for submission
  - a) Navigate to your project folder.
  - b) Include the *entire* folder in a zip file
  - c) Rename the zip file so it follows this convention: *A#.lastname.firstname*
  - d) Upload zip file to Blackboard site for our course

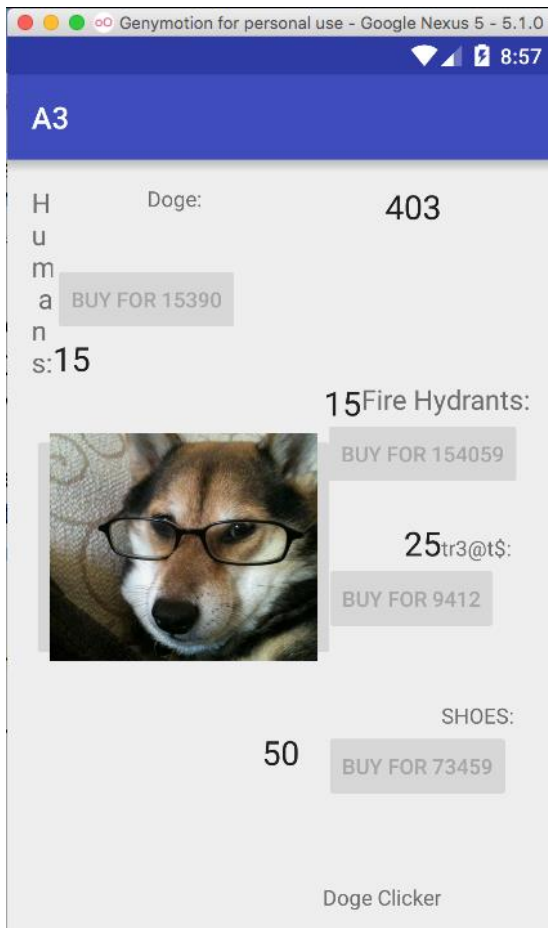
## Grading

Item	Points
UI – Visually appealing – Portrait	10
UI – Visually appealing – Landscape	10
saveInstanceState Functional	10
Can toast contribution of shoes, treats, humans, and hydrants	10
<b>Total</b>	<b>40</b>

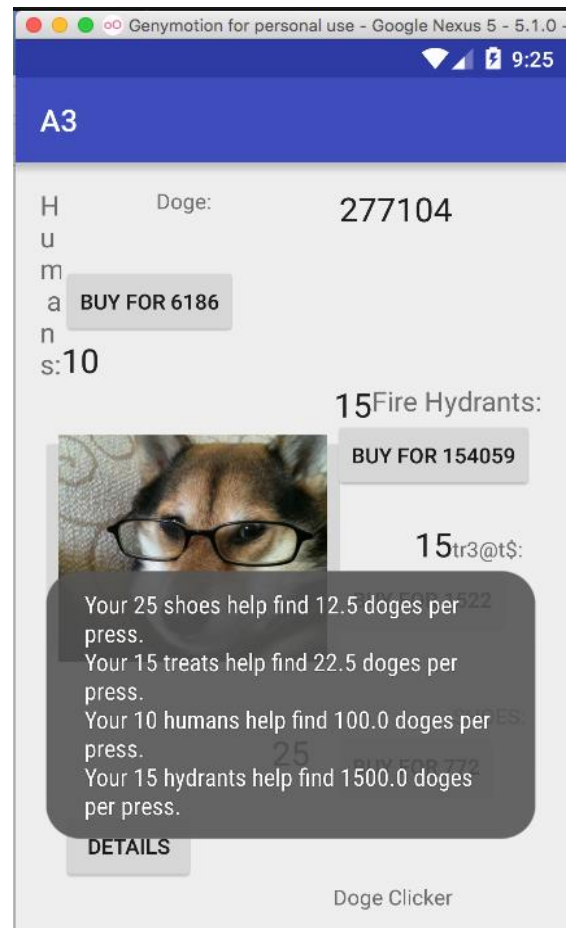
**Note: Test app on Pixel**



**Figure 1**



**Figure 2**



**Figure 3**