INTRODUCTION TO ANDROID APPS USING MIT APP INVENTOR & IOT

MAY 2016 — D.INGRAM RAPTORS IRRATIONAL INVENTIONS

SESSION PLAN

- INTRO

- SLIDES

- ????

- PROFIT

WHAT IS THE MIT APP INVENTOR

HTTP://AI2.APPINVENTOR.MIT.EDU/

APP INVENTOR FOR ANDROID IS AN OPEN-SOURCE WEB APPLICATION ORIGINALLY PROVIDED BY GOOGLE, AND NOW MAINTAINED BY THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT).

IT ALLOWS NEWCOMERS TO COMPUTER PROGRAMMING TO CREATE SOFTWARE APPLICATIONS FOR THE ANDROID OPERATING SYSTEM (OS). IT USES A GRAPHICAL INTERFACE, VERY SIMILAR TO SCRATCH AND THE STARLOGO TNG USER INTERFACE, WHICH ALLOWS USERS TO DRAG-AND-DROP VISUAL OBJECTS TO CREATE AN APPLICATION THAT CAN RUN ON ANDROID DEVICES. IN CREATING APP INVENTOR, GOOGLE DREW UPON SIGNIFICANT PRIOR RESEARCH IN EDUCATIONAL COMPUTING, AS WELL AS WORK DONE WITHIN GOOGLE ON ONLINE DEVELOPMENT ENVIRONMENTS.[1]

APP INVENTOR AND THE PROJECTS ON WHICH IT IS BASED ARE INFORMED BY CONSTRUCTIONIST LEARNING THEORIES, WHICH EMPHASIZES THAT PROGRAMMING CAN BE A VEHICLE FOR ENGAGING POWERFUL IDEAS THROUGH ACTIVE LEARNING. AS SUCH, IT IS PART OF AN ONGOING MOVEMENT IN COMPUTERS AND EDUCATION THAT BEGAN WITH THE WORK OF SEYMOUR PAPERT AND THE MIT LOGO GROUP IN THE 1960S AND HAS ALSO MANIFESTED ITSELF WITH MITCHEL RESNICK'S WORK ON LEGO MINDSTORMS AND STARLOGO

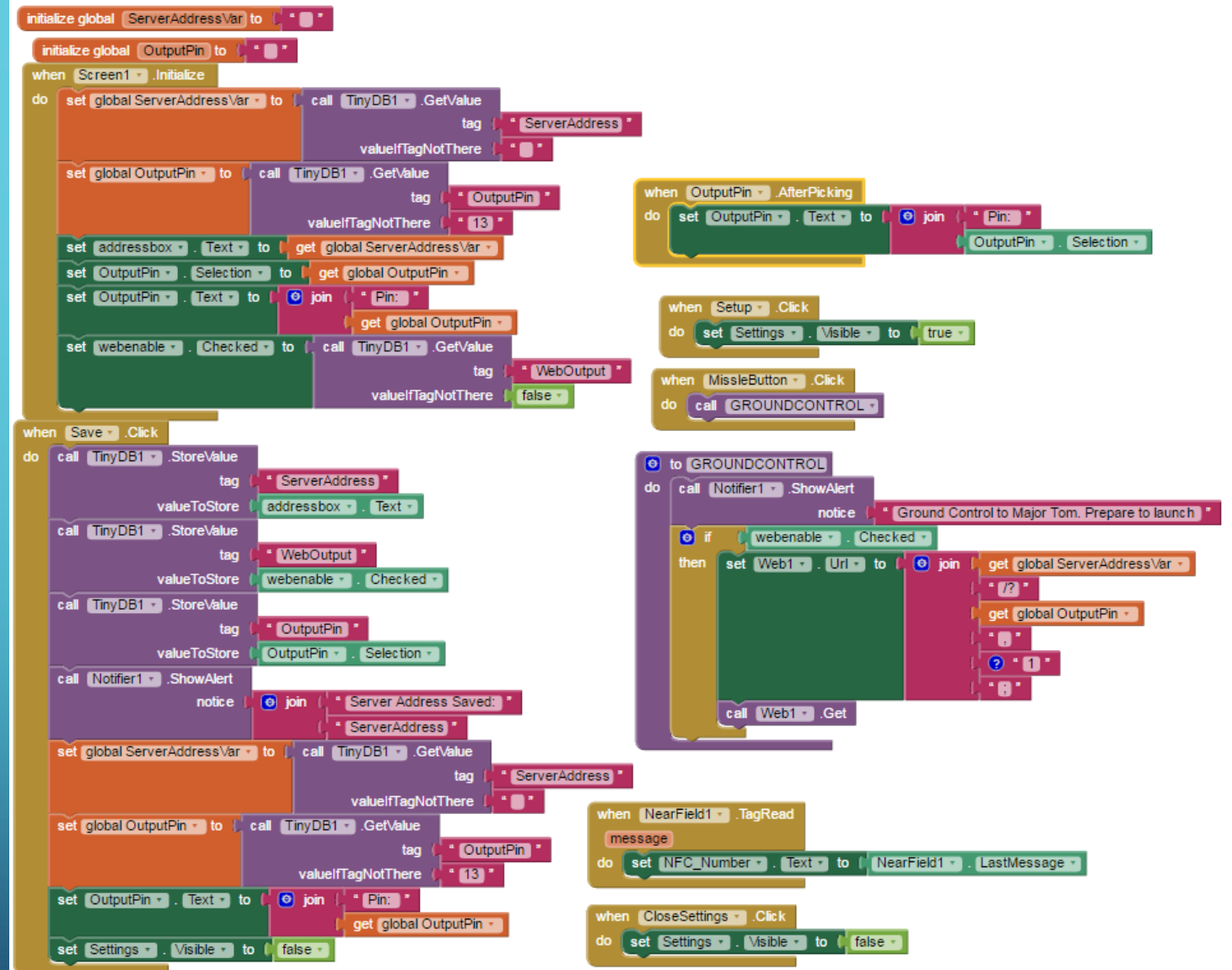Source: https://en.wikipedia.org/wiki/App_Inventor_for_Android

ADD GUI

Yay buttons

https://play.google.com/store/apps/details?id=appinventor.ai_raptordemon.HSC_demo
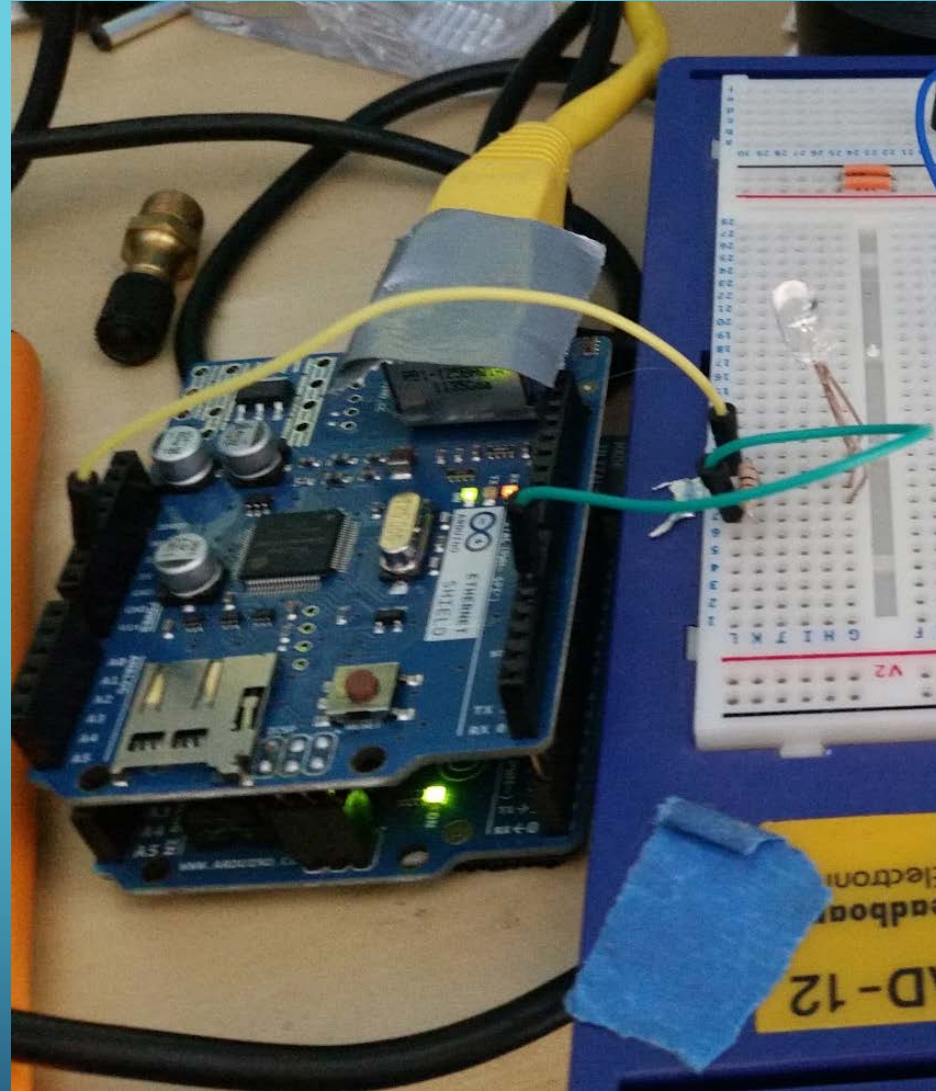
ADD LOGIC

If button pressed then launch rocket

ADD ARDUINO

This example uses an Arduino uno and

The Ethernet shield. Some leds and some

relays

Code is here:
https://github.com/raptordemon/AppInvento
r_Arduino_demo

THANK YOU – LIVE DEMO TIME

Code is here: https://github.com/raptordemon/AppInventor_Arduino_demo
App is here: https://play.google.com/store/apps/details?id=appinventor.ai_raptordemon.HSC_demo

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