

# EC 327 PROJECT GROUP 4

### **BUG FIXING**

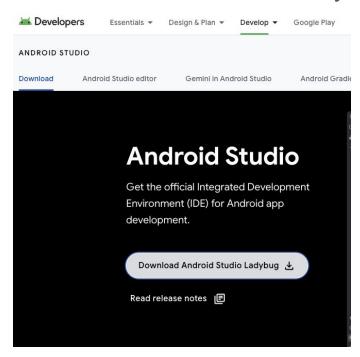
Group Members: Michael Lwe, Bryan Lam, Gregory Fan, Nishtha Ladi, Jivesh Jain

### **DOWNLOAD**

As the download takes quite a bit of time, downloading the project to be used later is advised.

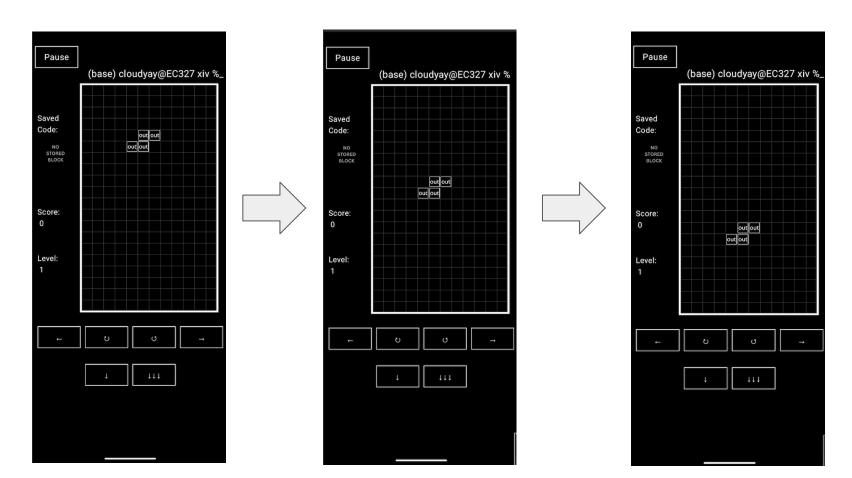
Unfortunately, it cannot be ran on the lab machines due to the lab machines running on an outdated version of Android Studio.

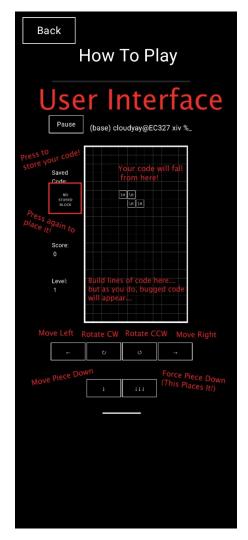
Step 1: Download/Update Android Studio to the Latest Version if not done so already.



## MINIMUM REQUIREMENTS

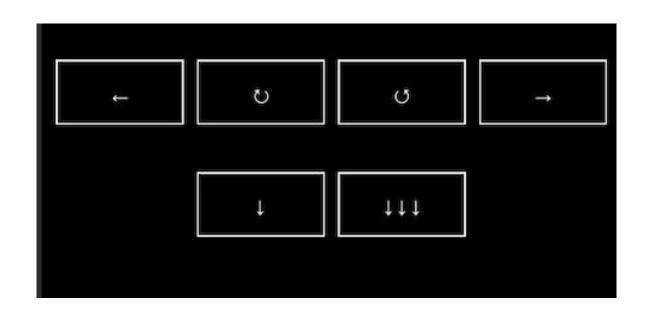
#### MOVING GRAPHICAL PIECES





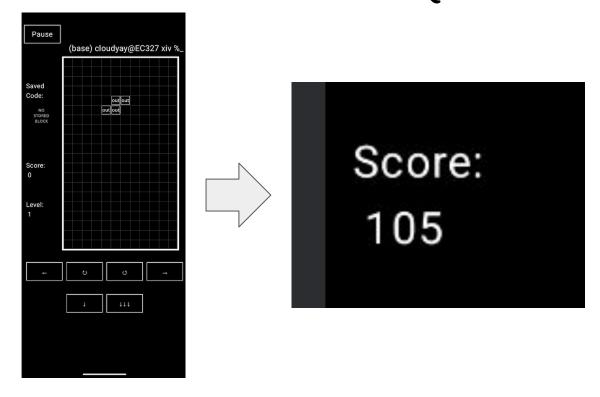
### CLEAR DOCUMENTATION OF THE RULES OF THE GAME

## THE ABILITY OF THE USER TO CONTROL SOME OF THE MOVING PIECES THROUGH INPUT



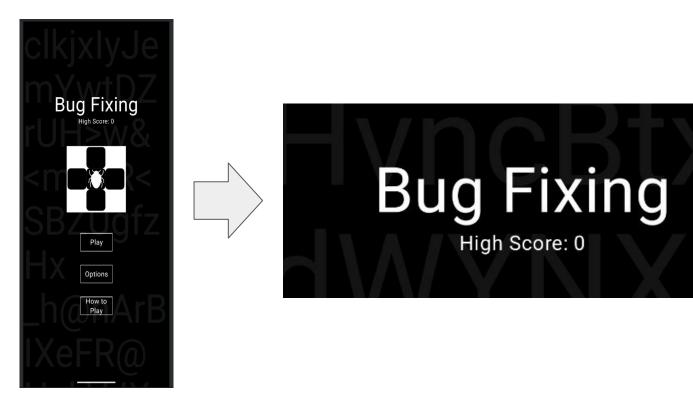


## SCORE DISPLAYED THAT IS CHANGED BASED ON THE USER SATISFYING REQUIREMENTS

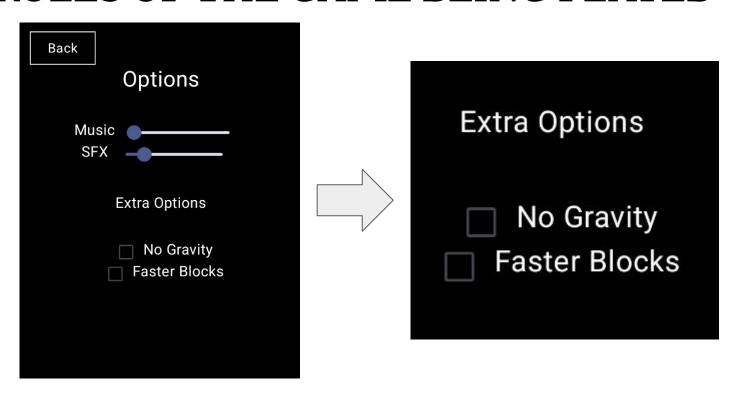


### ADDITIONAL FEATURES

## PROVIDE A HIGH SCORE LIST THAT PERSISTS WHEN THE APP IS CLOSED AND THEN REOPENED

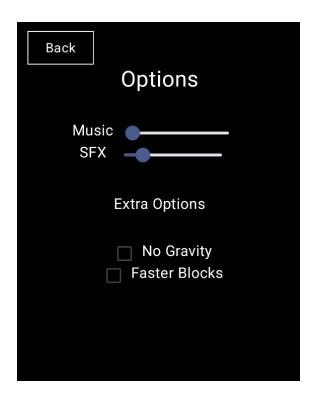


# ALLOW THE USER TO TWEAK THE RULES OF THE GAME BEING PLAYED



# ADD SOUND EFFECTS TO SPECIFIC ACTIVITIES OF THE GAME





# CALCULATIONS IN A LOWER-LEVEL LANGUAGE (C++ IMPLEMENTATION)



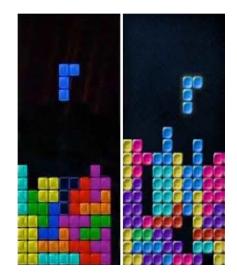
```
Main.calculateScore(JNIEnv *env, jobject Main , jint level, jint lines){
    double levelMult = 1;
    double lineMult = 1;
    levelMult *= (1.05 * (level % 10));
   if(lines == 1){
       lineMult = 1;
    }else if(lines == 2){
       lineMult = 1.1;
    }else if(lines == 3){
       lineMult = 1.2;
    }else if(lines == 4){
       lineMult = 1.5;
    double returnAmount = 100 * lines * lineMult * levelMult;
   return returnAmount;
```

#### **DESIGN DECISIONS**

#### Themed Around Terminal Code

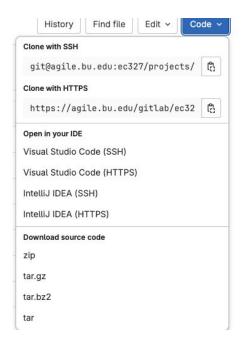
```
gradle.properties
                                                local.properties
build.gradle.kts
                       gradlew
                                                settings.gradle.kts
(base) gregoryfan@Gregorys-Air group4project % git branch
* gameLogic
  issue2
  issue3
  issue4
  issue5
  issue6
  issue8
  master
(base) gregoryfan@Gregorys-Air group4project % git branch gameLogicDownGrade
(base) gregoryfan@Gregorys-Air group4project % git checkout gameLogicDownGrade
        app/src/main/res/raw/void start.mp3
Switched to branch 'gameLogicDownGrade'
(base) gregoryfan@Gregorys-Air group4project % git push --set-upstream origin gameLogicDownGrade
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote: To create a merge request for gameLogicDownGrade, visit:
remote: https://agile.bu.edu/gitlab/ec327/projects/group4project/-/merge_requests/new?merge_requ
est%5Bsource_branch%5D=gameLogicDownGrade
To https://agile.bu.edu/gitlab/ec327/projects/group4project.git
* [new branch]
                    gameLogicDownGrade -> gameLogicDownGrade
branch 'gameLogicDownGrade' set up to track 'origin/gameLogicDownGrade'.
(base) gregoryfan@Gregorys-Air group4project % git checkout gameLogic
        app/src/main/res/raw/void_start.mp3
        gradle/libs.versions.toml
       gradle/wrapper/gradle-wrapper.properties
Switched to branch 'gameLogic'
Your branch is up to date with 'origin/gameLogic'.
(base) gregoryfan@Gregorys-Air group4project % ■
```

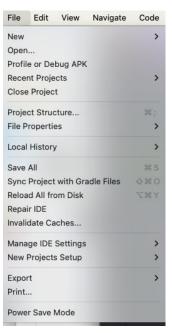
Does NOT violate the copyrights Tetris holds.



### **DOWNLOAD**

### Step 2: Pull project and open in Android Studio



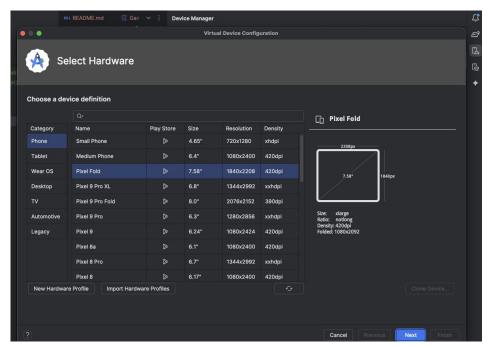


The Gradle Sync should automatically happen. If not, click

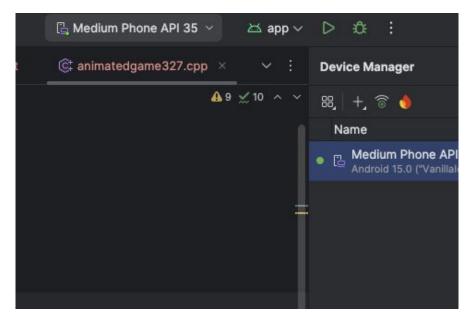
File -> Sync Project with Gradle Files

### **DOWNLOAD**

If needed, select a device to emulate on, with Device Manager, on the right taskbar of the interface.



Then click run!



### **VIDEO SHOWCASE**

