GitHub URLs

Account: https://github.com/Bluzix   Course Repository: https://github.com/Bluzix/CEG-3900-SP17

# Task 1: Build OpenSudoku As-Is

      Since I downloaded and built this for Android Internals and Security, I decided to try it again but in a different folder. I moved Terminal into ~/Documents/MobileComp/P2 and called `git clone` https://github.com/ogarcia/opensudoku.git to download OpenSudoku right off of GitHub. I then called `studio` to load up Android Studio to build the source code. I had it's version of the build tools already downloaded into my Android Studio. I ran a test on an 5X emulator running API 23 to make sure there was nothing else left for me to modify to get it to build. Everything checked out so I built the signed APK so that I could test it on my Lenovo Tab3; after I delete the old OpenSudoku first from my Tab3. I then moved the signed APK to the P2 directory, named it openSudoku.apk, closed the emulator, and then called `adb install openSudoku.apk` to install the new APK to my connected Tab3. Everything seemed fine on my Lenovo, so I felt confident in saying that the source code has been built successfully.

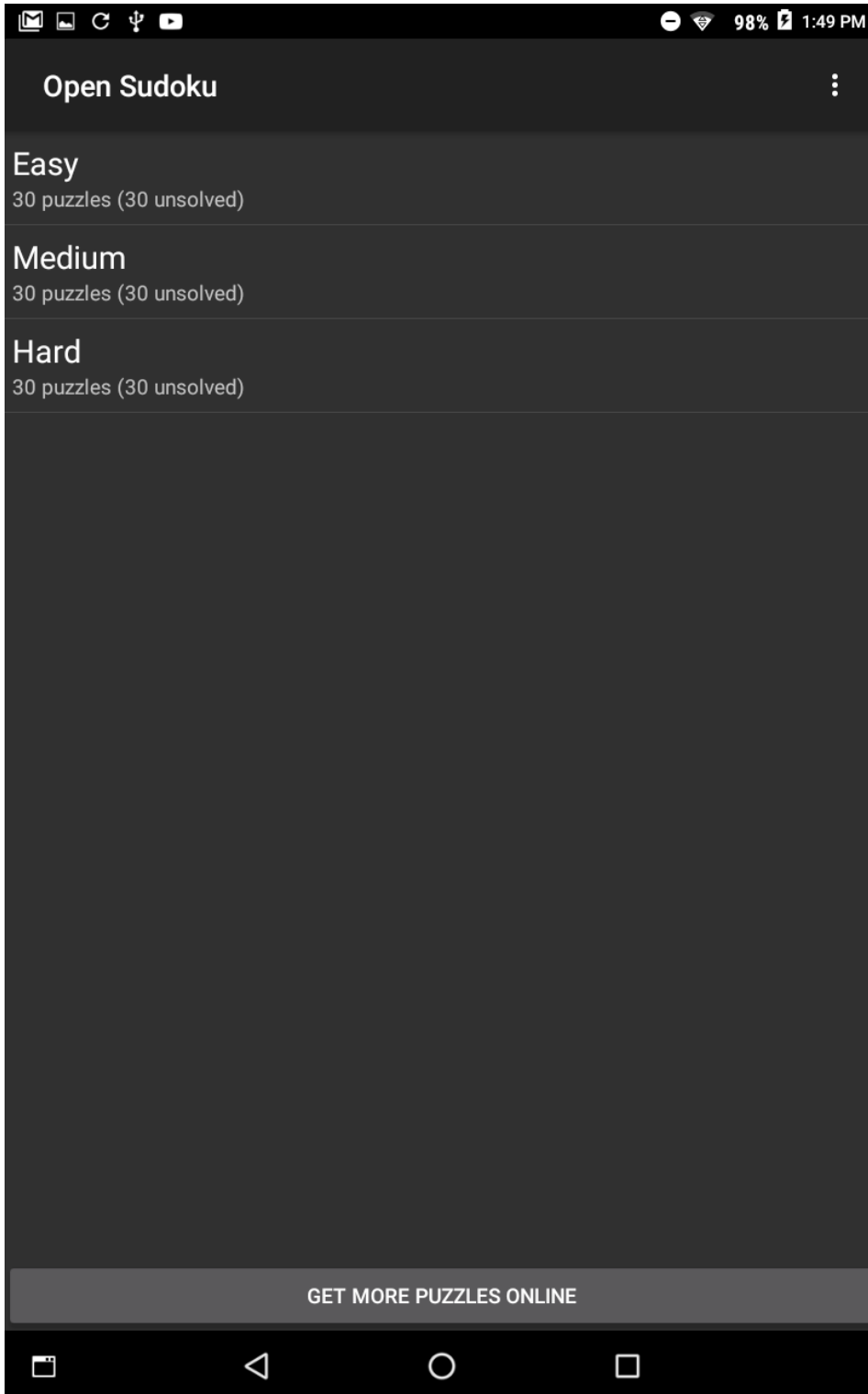*It took 21 minutes and 31 seconds to complete this Task*

Task 2: Prune OpenSudoku

Before
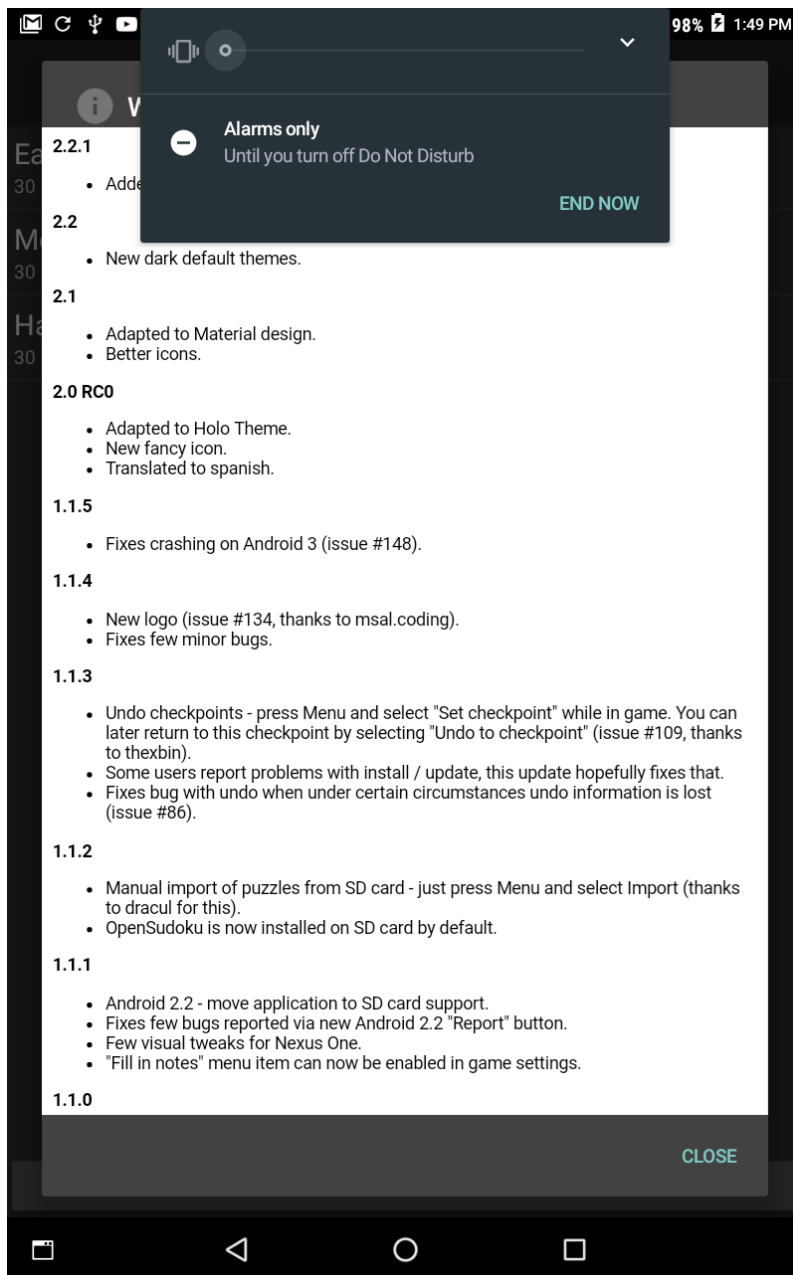
As I was doing Task 1, I managed to pull some images from Open Sudoku. Here is the first image of Open Sudoku, which was taken when the app was first opened. This list of version changes are nice, but are definitely not needed for my version of Open Sudoku that will run over FireBase.

Here's another screen that won't be needed in the final version. This screen is to select the difficulty of a puzzle you want to do. It's really just selecting which collection of puzzles that you want to do that the developers have deemed easy, medium, or hard. This screen was hiding below the version info screen that was shown above.

Sam Lincoln
CEG 3900
1/27/17
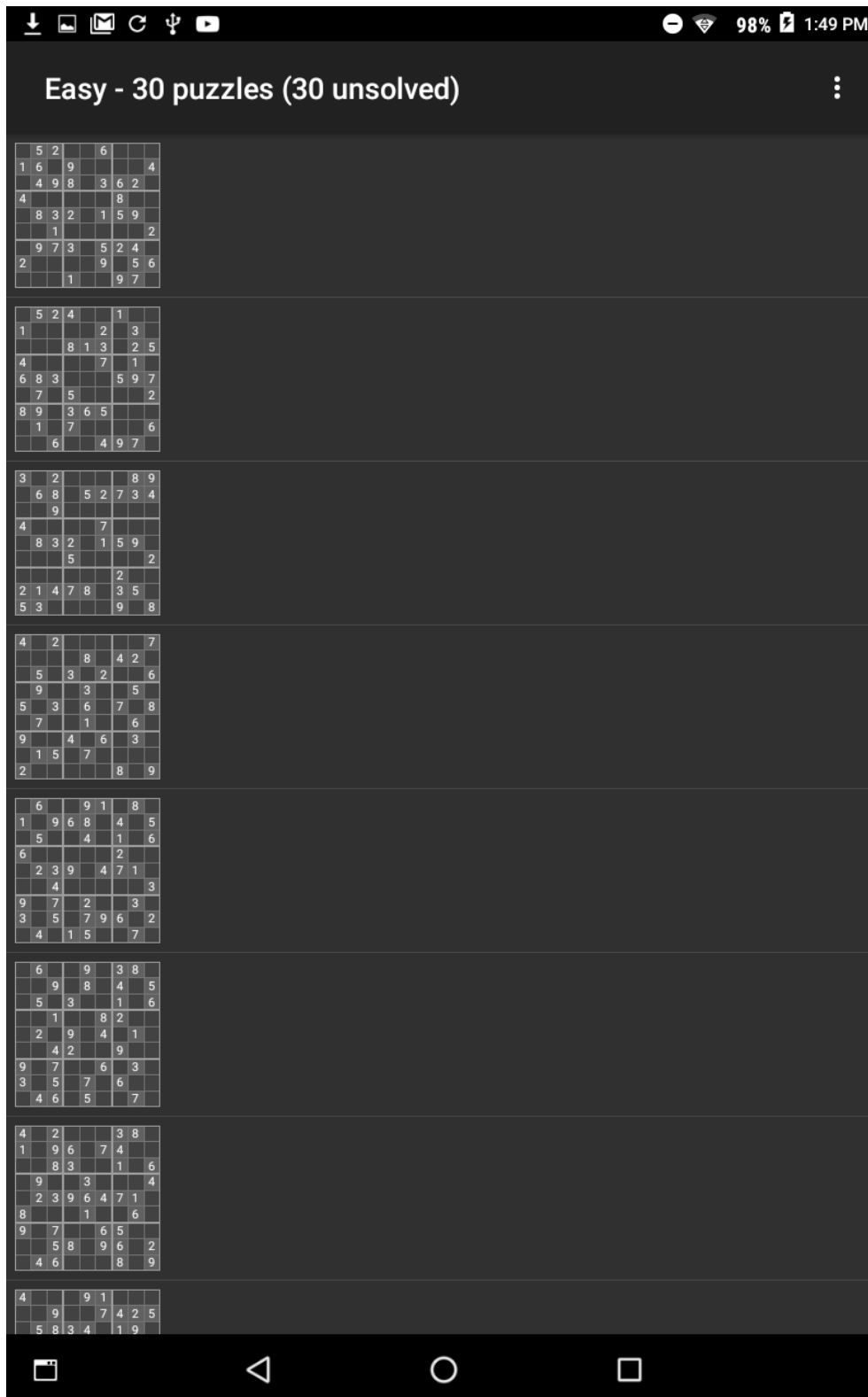
After selecting a difficulty, you are treated to another screen that will not be used in the final app.   This lists the puzzles that were a part of the difficulty collection. This screen contains thumbnails of each puzzle in this collection. The thumbnail will change to match the progress that you made on each puzzle, and the time that you've spent on each puzzle. It's a pretty cool screen, but it has to go for our collaborative Sudoku app.
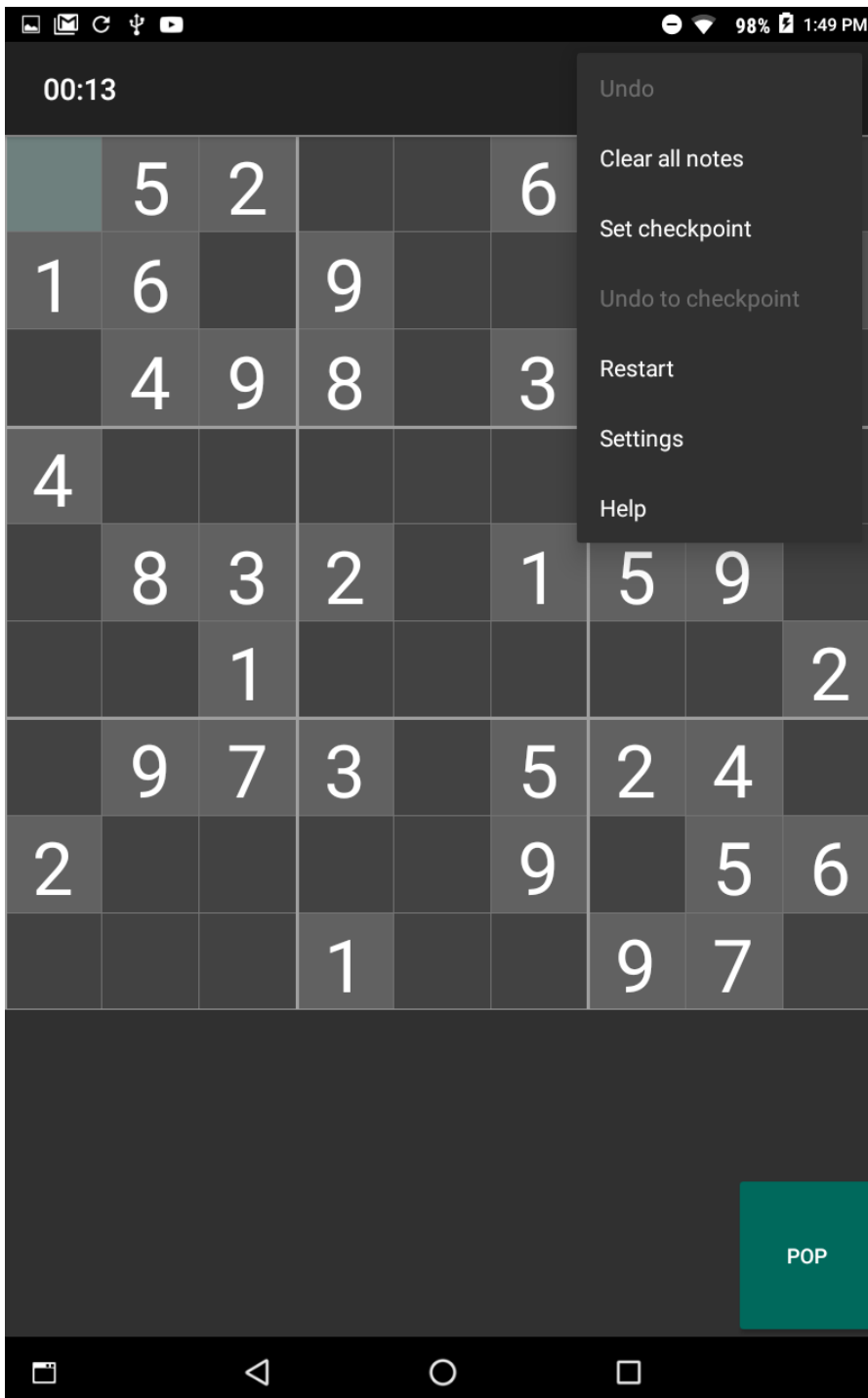
Here's the one screen that we actually want to keep, and it is the one we complete the puzzles with. It does have a few things we could get rid of: the timer (which would be a pain to sync among clients), undo option, clear all notes, set/load checkpoints, and restart. We want to keep the puzzle grid, help, the entry types (those are easy to keep because they call the same method to update the grid), and possibly the settings (which just changes the color of the grid).

Now, with the pictures of the original out of the way, we can start to prune the app down to just solving the puzzle. I'll list the changes that I've made in the "after" section of this task.

After

List of Changes

- Changed applicationId in build.gradle (Module: app) to "edu.wright.ceg3900"

- Changed the refernce of org.moire.opensudoku in game_settings.xml to edu.wright.ceg3900 to match the new applicationId

- Changed xmlns:os in game_settings.xml to be edu.wright.ceg3900 to match the new applicationId

- Manually renamed the directories of …/src/androidTest/java and …/src/main/java, to reflect the new applicationId

- Changed package of java/edu.wright.ceg3900 (androidTest)/ApplicationTest to edu.wright.ceg3900

- Changed package and imports of java/edu.wright.ceg3900/db/DatabaseHelper to edu.wright.ceg3900

- Repeat for other classes in db: FolderColumns, SudokuColumns, SudokuDatabase, SudokuImportParams, and SudokuInvalidFormatException

- Repeat for classes in java/edu.wright.ceg3900/game/command: AbstractCellCommand, AbstractCommand, ClearAllNotesCommand, CommandStack, EditCellNoteCommand, FillInNotesCommand, and SetCellValueCommand

- Repeat for classes in java/edu.wright.ceg3900/game: Cell, CellCollection, CellGroup, CellNote, FolderInfo, and SudokuGame

- Repeat for classes in java/edu.wright.ceg3900/gui/exporting: FileExportTask, FileExportTaskParams, and FileExportTaskResult

- Repeat for classes in java/edu.wright.ceg3900/gui/importing: AbstractImportTask, ExtrasImportTask, OpenSudokuImportTask, and SdmImportTask

- Repeat for classes in java/edu.wright.ceg3900/gui/inputmethod: IMControlPanel, IMControlPanelStatePersister, IMNumpad, IMPopup, IMPopupDialog, IMSingleNumber, and InputMethod

- Repeat changes to package and imports for classes in java/edu.wright.ceg3900/gui: Changelog, FileImportActivity, FileListActivity, FolderDetailLoader, FolderListActivity,

GameSettingsActivity, GameTimeFormat, HintsQueue, ImportSudokuActivity, SeekBarPreference, SudokuBoardView, SudokuEditActivity, SudokuExportActivity, SudokuImportActivity, SudokuListActivity, SudokuListFilter, SudokuPlayActivity, and Timer

- Repeat changes to package and imports for java/edu.wright.ceg3900/utils classes: AndroidUtils, Const, and StringUtils

- Changed package to "edu.wright.ceg3900" in /app/manifests/AndroidManifest.xml

- Changed ic_launcher icon

- Removed /app/res/raw, the Changelog use in FolderListActivity (line 117 and 118), and safe deleted /app/java/edu.wright.ceg3900/gui/Changelog

- Removed private final class GameTimer from …/java/edu.wright.ceg3900/SudokuPlayActivity, mGameTimer variable, empty "if (mShowTime)" blocks, and safe deleted /app/java/edu.wright.ceg3900/gui/Timer

- Removed GameTimeFormat use from …/java/edu.wright.ceg3900/gui/SudokuListActivity, empty "if (time != 0)" block, removed GameTimeFormat from …/java/edu.wright.ceg3900/gui/SudokuPlayActivity, mGameTimeFormatter from .setMessage (line 376), void updateTime(), the use of updateTime() (line 199), and safe deleted …/java/edu.wright.ceg3900/gui/GameTimeFormat

- Safely deleted …/java/edu.wright.ceg3900/gui/FileImportActivity

- Removed ImportSudokuActivity use in …/java/edu.wright.ceg3900/gui/SudokuImportActivity, changed TAG to "SudokuImportActivity, removed protected Dialog onCreateDialog(final int) (line 156) from …/java/edu.wright.ceg3900/gui/FileListActivity, removed protected void onPrepareDialog(int, Dialog) (the new line 156), deleted ImportSudokuActivity import from …/java/edu.wright.ceg3900/gui/AbstractImportTask, renamed the ImportSudokuActivity in the comments in AbstractImportTask, safe deleted …/java/edu.wright.ceg3900/gui/ImportSudokuActivity

- Removed SudokuImportActivity from AndroidManifest.xml, safe deleted …/java/edu.wright.ceg3900/gui/SudokuImportActivity

- Safe deleted SdmImportTask, OpenSudokuImportTask, ExtrasImportTask, and AbstractImportTask; also, deleted …/java/edu.wright.ceg3900/gui/importing folder

- Changed @strings/app_name to "Pruned Sudoku"

- Changed org.moire.opensudoku in land/sudoku_play.xml layout to edu.wright.ceg3900

- Changed org.moire.opensudoku in sudoku_list_item.xml layout to edu.wright.ceg3900; also, did the same for the sudoku_play.xml, land/sudoku_edit.xml, and sudoku_edit.xml layouts

- Removed MENU_ITEM_ADD, MENU_ITEM_IMPORT, and MENU_ITEM_EXPORT_ALL from …/java/edu.wright.ceg3900/gui/FolderListActivity; changed the values of the remaining private static final ints based on Menu.FIRST; changed MENU_ITEM_ABOUT's Order in onCreateOptionsMenu from 2 to 0; removed MENU_ITEM_EXPORT; changed Order in onCreateContextMenu and removed the entry for MENU_ITEM_EXPORT; removed case for MENU_ITEM_EXPORT in onContextItemSelected; and safely removed …/java/edu.wright.ceg3900/gui/SudokuExportActivity

- Safely deleted …/java/edu.wright.ceg3900/exporting: FileExportTask, FileExportTaskParams, FileExportTaskResult, and deleted the exporting directory

- Removed R.drawable.ic_cloud_upload

- Added MENU_ITEM_ABOUT to …/java/edu.wright.ceg3900/gui/SudokuPlayActivity, added it to onCreateOptionsMenu, same for onOptionsItemSelected, added LayoutInflater factory to protected Dialog onCreateDialog and copied the DIALOG_ABOUT case from ../java/edu.wright.ceg3900/gui/FolderListActivity (I moved the About option from FolderListActivity to SudokuPlayActivity).

- Moved the intent-filter for .gui.FolderListActivity in AndroidManifest.xml and placed it in .gui.SudokuPlayActivity (which should make this activity be the MAIN and LAUNCHER). This caused an error, to fix I edited the onCreate function: in the if statement on line 133, I removed line 136 and set mSudokuGameID to automatically reference a blank Sudoku puzzle I added in …/edu.wright.ceg3900/db/DatabaseHelper (which replaces the old db entries)

- Removed if statement block on line 185 on …/gui/SudokuListActivity, the MENU_ITEM_FOLDERS case in onOptionsItemSelected(MenuItem), and safely deleted FolderListActivity

- Safely deleted FileListActivity, SudokuListActivity, and FolderDetailLoader

- Safely deleted R.drawable.ic_add, ic_share, ic_sort, and ic_view

- Removed MENU_ITEM_UNDO, MENU_ITEM_SET_CHECKPOINT, MENU_ITEM_UNDO_TO_CHECKPOINT, and DIALOG_UNDO_TO_CHECKPOINT from …/java/edu.wright.ceg3900/gui/SudokuPlayActivity

- Removed layouts: file_list.xml, file_list_item.xml, folder_list.xml, folder_list_item.xml, folder_name.xml, import_sudoku.xml, sudoku_export.xml, sudoku_list.xml, sudoku_list_item.xml, and sudoku_list_item_note.xml

- Editied the content of the About dialog box to reflect this project

- Editied the content of the README.md file to reflect this project

Pictures
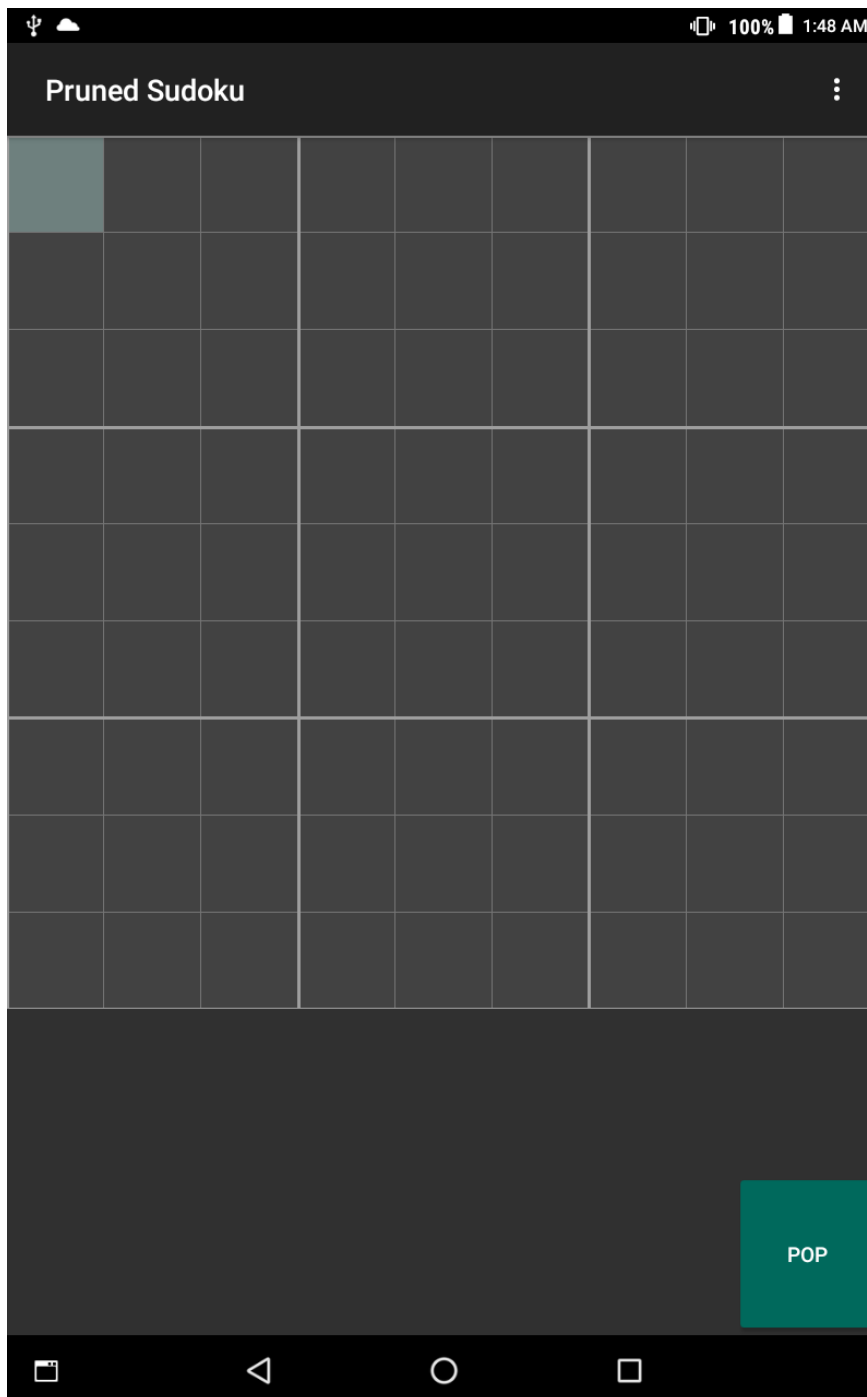
Here's the new starting screen for the Pruned Sudoku app. This is the SudokuPlayActivity, that is being populated with a puzzle of all zeros by the Sudoku Data Base classes within the app. The all zeros puzzle is equal to a blank grid shown in the picture. I'll probably cut the Data Base code and replace it with code to retrieve information from FireBase.
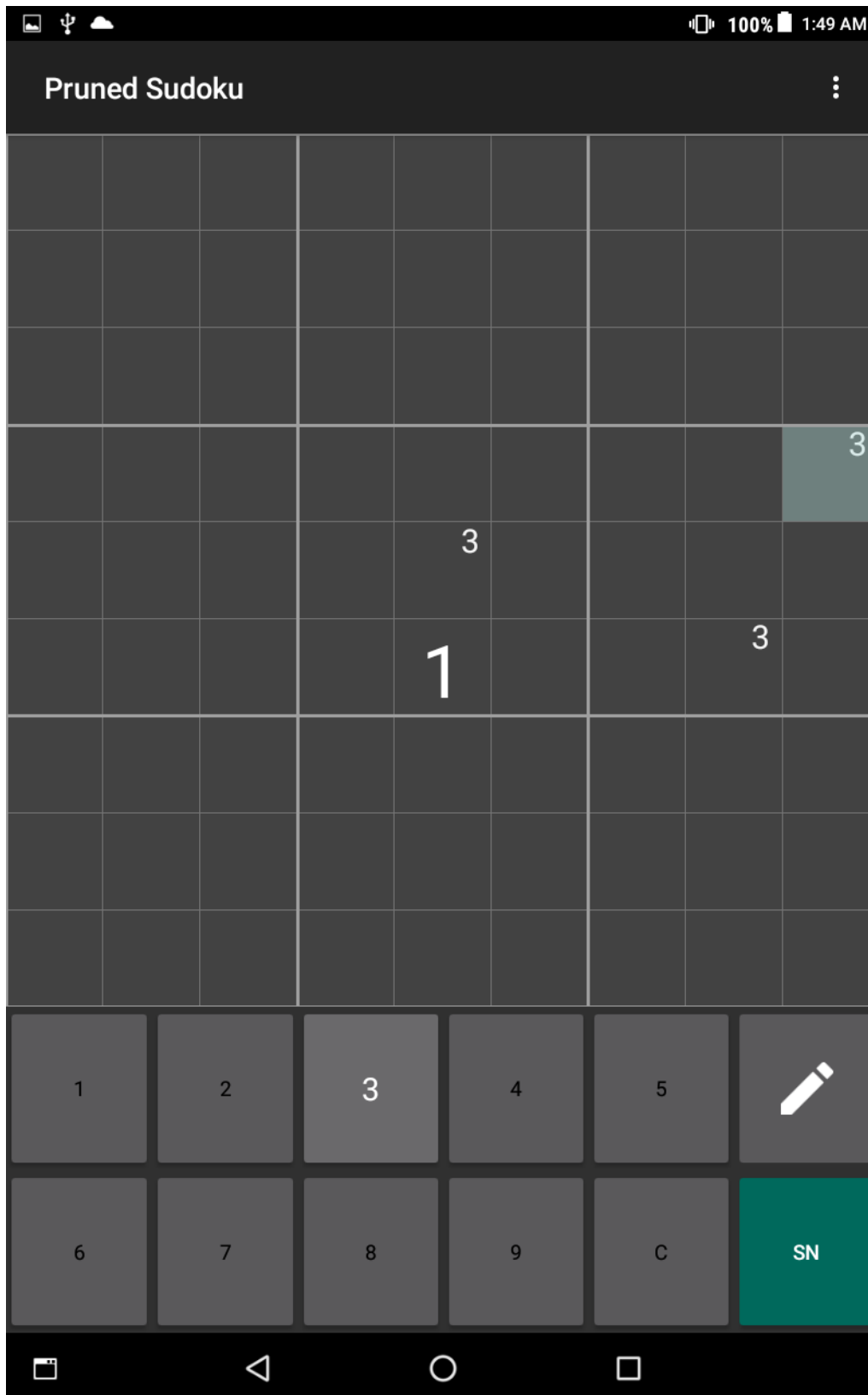
Sam Lincoln
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1/27/17
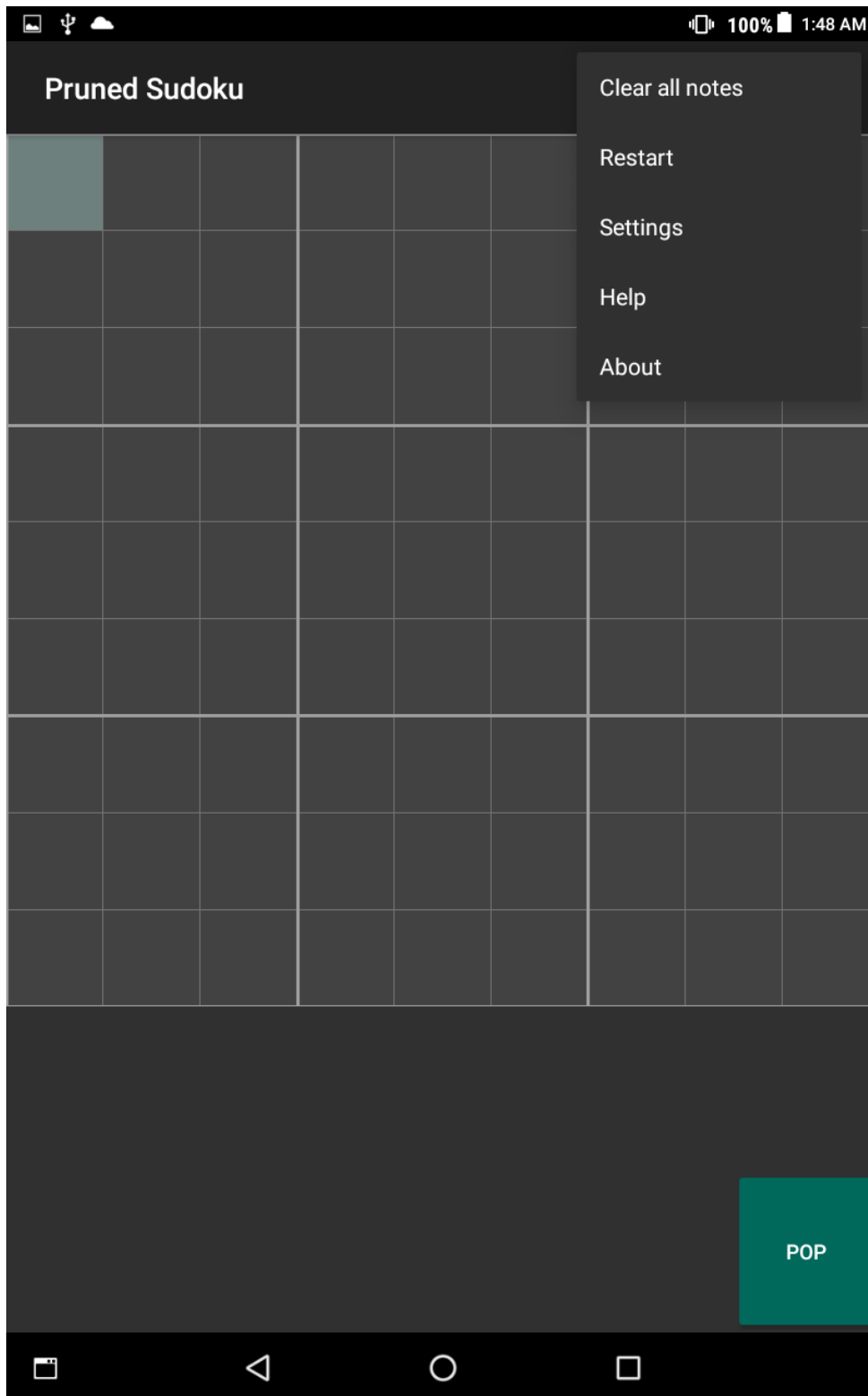
Here's the new options when on the SudokuPlayActivity. I've kept the ability to clear notes, since the notes we're just marking used to keep track of possible number locations. Restart was also kept, but might be changed to Reload once FireBase is installed on the app. Settings and Help are also the same as they used to be on Open Sudoku. I've also moved the About option from the Folder List Activity to the SudokuPlayActivity.
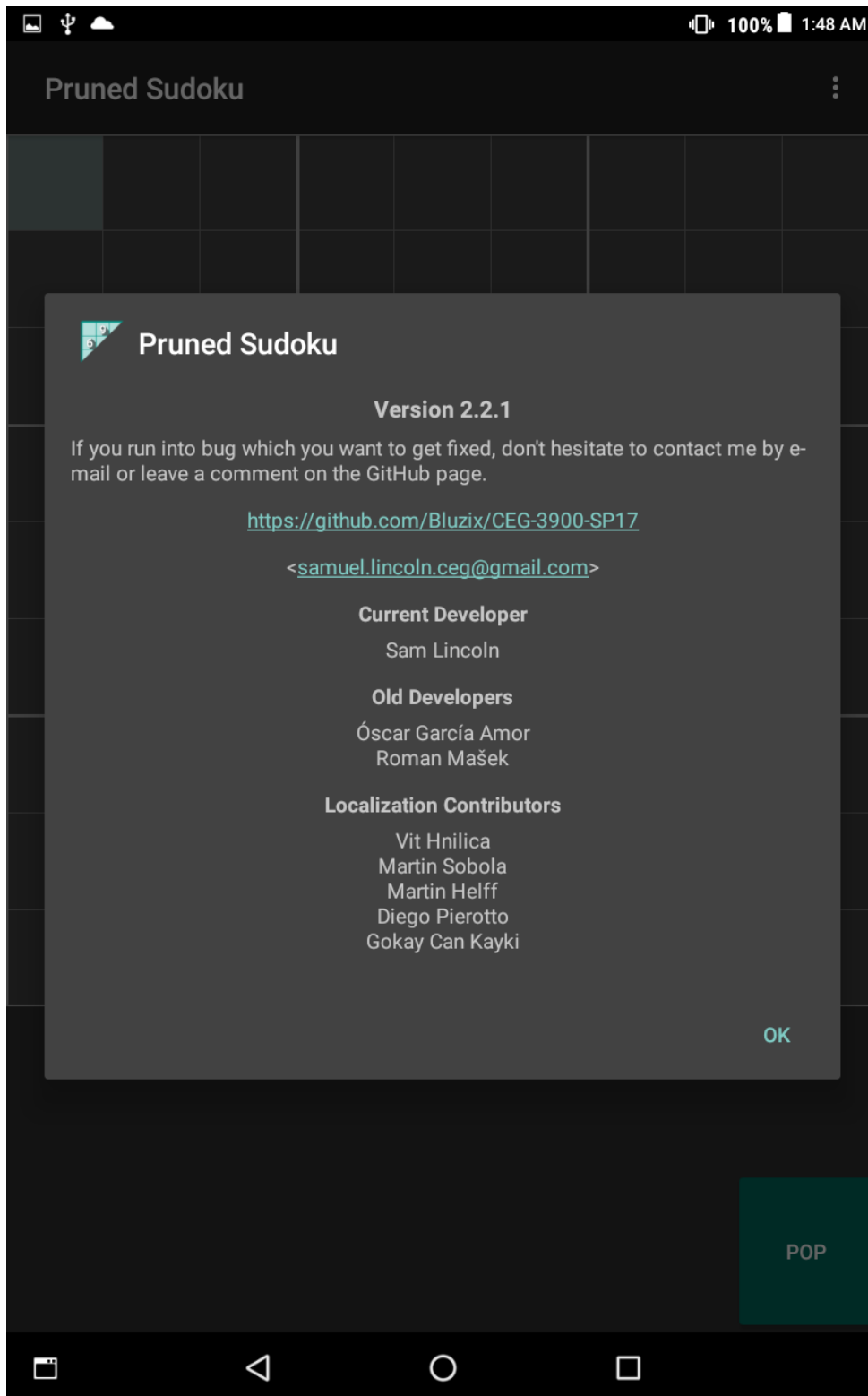
Here's the About page that can now be accessed by the new options on SudokuPlayActivity. Then links have been changed to reflect the new project (Pruned Sudoku). I've also changed it to list me as the Current Developer, and I've moved Amor to Old Developers. I forgot to change the Version number, but I'll do that once I get FireBase working in the new app.

Pruned Sudoku

Pruned Sudoku

Version 2.2.1

If you run into bug which you want to get fixed, don't hesitate to contact me by e-mail or leave a comment on the GitHub page.

https://github.com/Bluzix/CEG-3900-SP17

<samuel.lincoln.ceg@gmail.com>

Current Developer
Sam Lincoln

Old Developers
Óscar García Amor
Roman Mašek

Localization Contributors
Vit Hnilica
Martin Sobola
Martin Helff
Diego Pierotto
Gokay Can Kayki

OK

POP

Here's another picture which shows the app in action. It shows that other input methods were left intact from Open Sudoku. Here a number has been placed on the blank grid, along with a few notes. This should give us a nice base app to start building a FireBase collaborative Sudoku app.

It took 7 hours, 30 minutes, and 37 seconds to complete this Task; 7 hours, 52 minutes, and 8 seconds total

Task 3: FireBase Storage
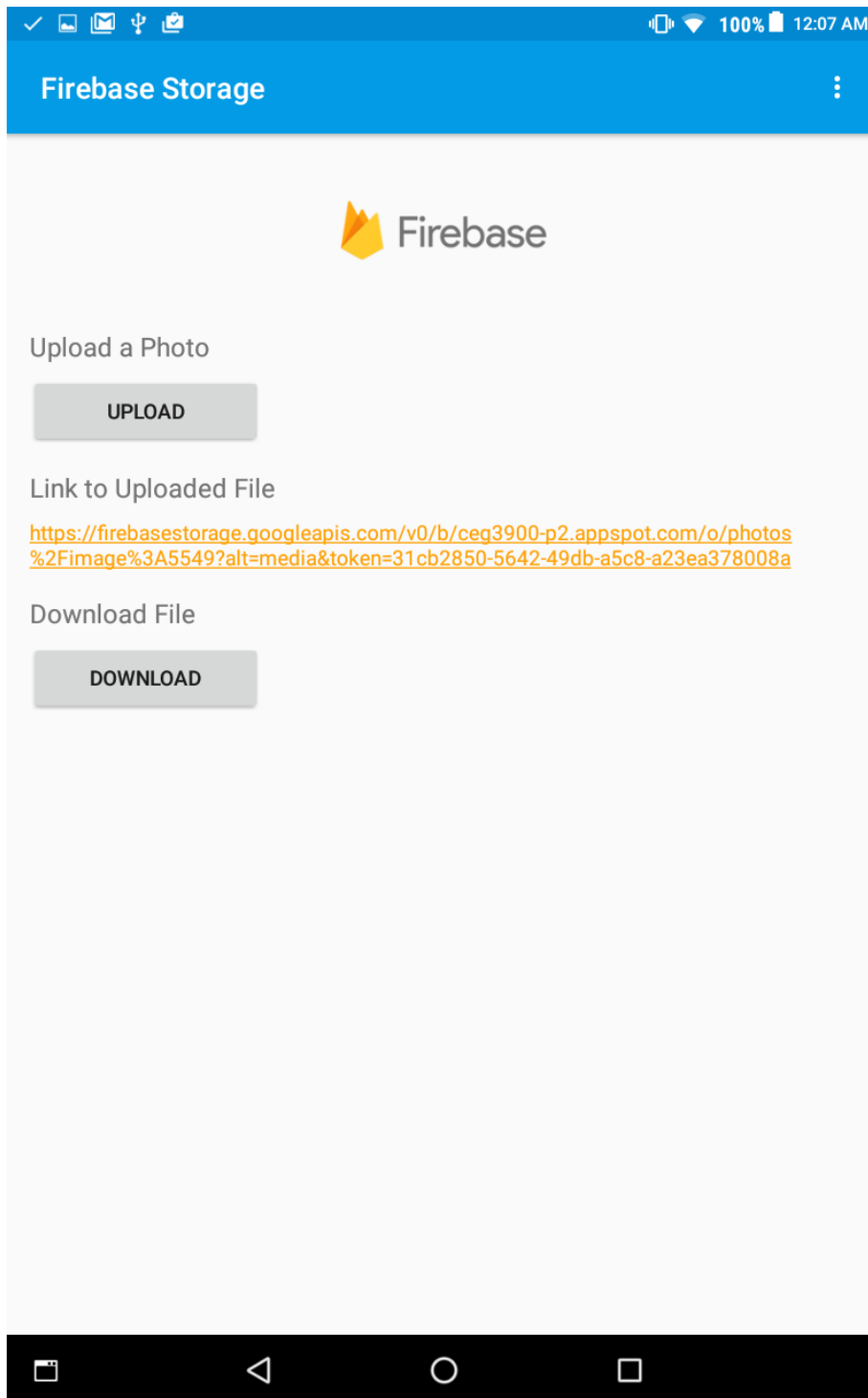
I had to change the Build Tools version 25.0.2 (latest), and I got most of the information to fill out the FireBase forms from storage/app/build.gradle. After filling out the form on FireBase console, I received a firebase-google.json file that I place in /storage/app directory. Then I checked to make sure the build gradles were set, which already had the necessary lines of code to work with the new json file. I also went into my FireBase console and enabled Anonymous Authentication for the FireBase project for P2. Also, I had to disable Instant Run in Settings → Build, Execution, Deployment → Instant Run and restarted Android Studio. However, that didn't work. I ended up updating my Android Studio to 2.2.3 and that updated the Gradle for this project to allow it to build. I manage to use Anonymous Authentication to upload an image to my FireBase project.

It took me 46 minutes and 29 seconds to complete this Task; 8 hours, 38 minutes, and 37 seconds total

Task 4: FireBase Authentication
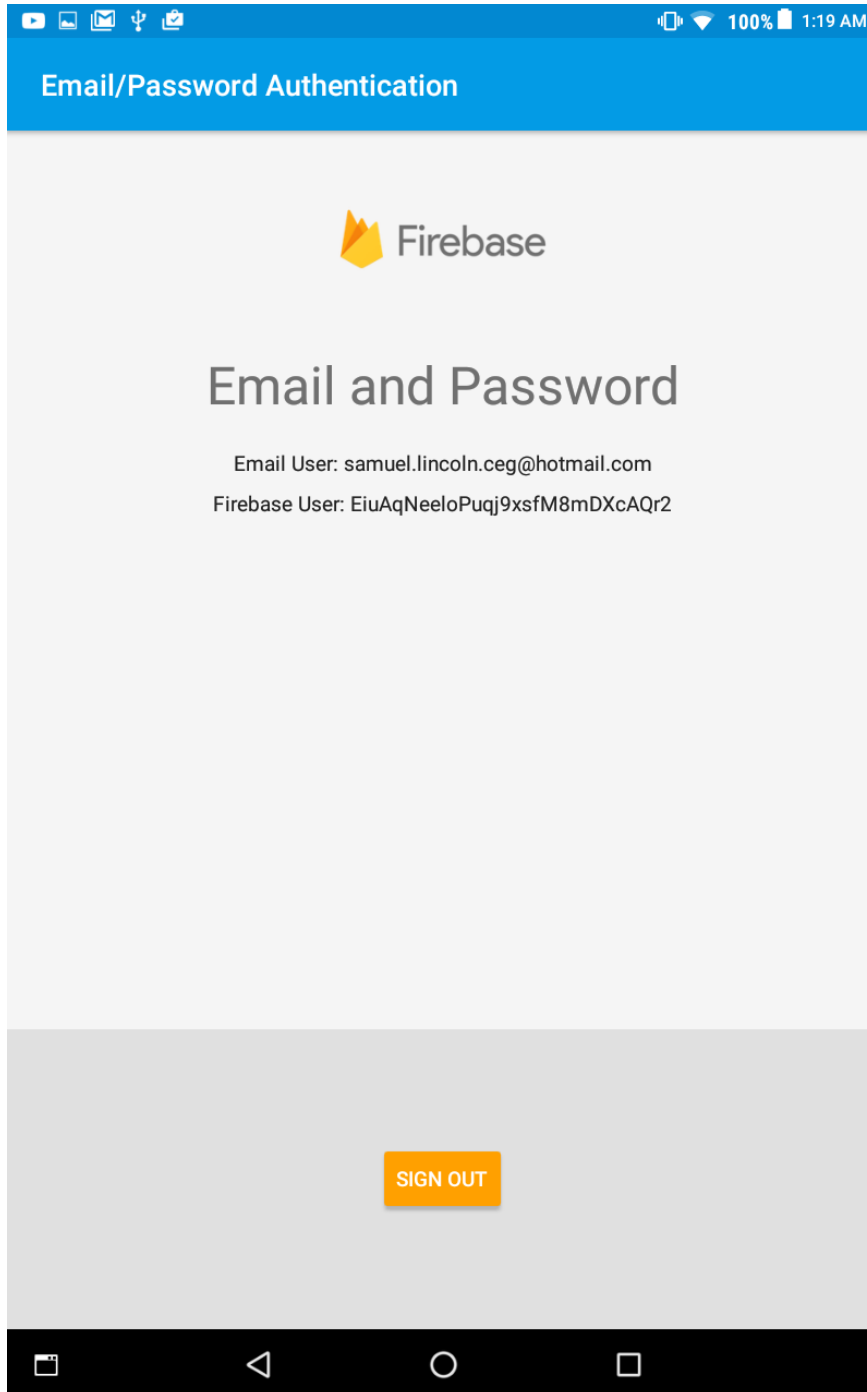
I had to change the buildToolsVersion in /auth/app/build.gradle to 25.0.2 (latest). After trying to sync the project, it detected the Android Gradle plugin and Gradle versions; which, it then updated to the latest version of the plugin and Gradle. I picked up the applicationId for the FireBase forms, got the firebase-google.json file, and added it to /auth/app. I went into my FireBase console, enabled Email/Password, and Google sign-in methods. I'll enable FaceBook and Twitter logins some other time, since they take extra stuff from those respective sites. I was able to create an account using my hotmail email address and log in through my app.

It took me 26 minutes and 7 seconds to complete this Task; 9 hours, 4 minutes, and 44 seconds total

Task 5: GitHub

I just went to GitHub.com and clicked the Sign up button to start the process of creating my account. I was able to quickly sign up for a free tier for unlimited public repositories, and then set up some personal information on what I was interested in. Once that was done, I had my account. Here's my url: https://github.com/Bluzix. Once I verified my email, I created a repository for this class called CEG-3900-SP17 found here at https://github.com/Bluzix/CEG-3900-SP17. To add a directory, I went to "Upload files" on the CEG-3900-SP17 page and then dropped in directory P2 with a dummy file foo.txt in it. It was able to push the directory to GitHub, and it stored my description of the latest commit to master. That's all you got for now, and I'll have to wait to add the real P2 in there.

I had nearly forgot to upload the files for P1. So I did by using the same technique I used to upload the dummy file for P2.

It took 29 minutes and 53 second to complete this Task; 9 hours, 34 minutes, and 37 seconds total

Feedback

This was a pretty good lab: I didn't find anything too difficult to do while completing this lab. I liked that you gave a description of what the pruned version of Open Sudoku should look like when the task is complete; which, was something that was needed when the same task was given in CEG 4440 Android Internals and Security. I also liked that the number of FireBase quick start apps that I had to build was cut down to only two, instead of five in 4440. I'm also glad that I now have a GitHub account. However, I'm unsure if you want README.md files inside of each of our directories, but I'm sure it would be a nice optional addition. Plus, it would be awesome to know of any suggested Linux apps to use when working with GitHub: when I worked with The Morley Group, we used a program called SourceTree to push commits to our GitLab; however, SourceTree is only for Windows and macOS.