Weekly Scrum

Sprint - 1

Project Avalanche

Team Members:
Bryce Schumacher
Saifil Ali
Chad Caddie
Chris Folleras

A) Project Backlog

Overall Goals:

- Team selection, week selection, game selection
- GUI with drop downs, forms, and buttons
- Service provider interface mapped into an android architecture
- Translation of program calls into android's "activities"
- User Interaction through touch, keyboard, dropdowns and other menus

Current Week:

- Met with team and discussed goals
- Installed Android Studio
- Gained understanding in Android Studio
- Created base project for app
- Created a Home-Page for the main screen.

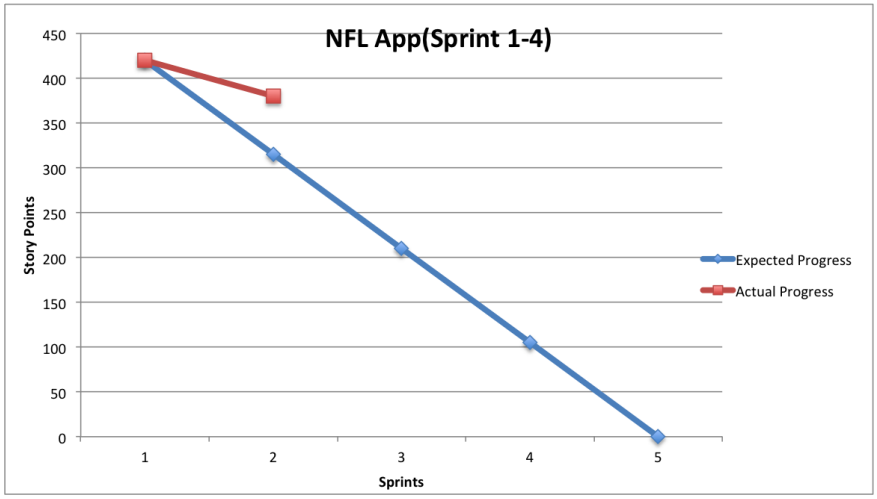
B) Subsequent Week Project Backlog:

- Finish all windows for the app
- Link all pages together with navigation buttons
- Implement a name input field
- Insert a season selector
- Begin work on database

C) Sprint BackLog(user stories):

- Bryce Schumacher
  - Installed and troubleshot Android Studio. Created homepage. Familiarized with Android Studio
  - Swipe feature to go between matchups should be added.
- Saifil Ali
  - Learned Android Studio basics and taught Bryce how to develop with the program. Created Scrum initiatives and managed team
  - Sound effect on every button click.
  - Background music for whole app.
- Chris Folleras
  - Set up Android Studio for application development
  - Collaborated with team to cement and establish initial scrum plans
  - Worked with Saif, Bryce, and Chad to reconfigure and improve facets of the homepage

D) Burndown Chart:



On the burndown chart pictured above, the team started a project that was planned to be four sprints. They began with 420 story points of work. To finish within four sprints, they planned to average 105 points per sprint. The first sprint did not go well because everyone was trying to become familiarized with Android Studio and App Development. So, they completed 40, leaving 380.

E) Scrum Master Notes(status,plans,issues): Our team nominated Saifil as a scrum master. As such, he will manage project details, progress specifics, and individual required features needed for the application.

Week One

- Week one we had several issues installing the Android Studio. After much effort we were able to get it running. Once installed we familiarized ourselves with the program and created a base project to build off of. Once this was completed we built a homepage for our app and outlined subsequent pages to be completed in the coming week.

F) Summary Report(End of week SCRUM):

- **Review:** Everything did not go according to plan. Unfortunately, time was not managed properly but we were still able to make a base project and finish our deliverable on time which is an accomplished milestone.

- **Demo Status:** Homepage demo is presentable

G) Demo Code:

We have uploaded the base Android App Project in a separate zip file called “Android.zip”. This is just the base file upon which we will build until we have a finished product.

H) Individual Team Report Document:

Bryce: Wrote Scrum Report(Part A,C,E,G)
Saifil: Wrote Scrum Report(Part D,F,G)
Chris: Wrote Scrum Report(Part C,E,G)
Chad: Wrote Scrum Report(Part A,H)

References:

https://www.youtube.com/watch?v=XU0llRltyFM
https://www.youtube.com/watch?v=9TycLR0TqFA

Sprint - 2
Project Avalanche

Team Members:
Bryce Schumacher
Saifil Ali
Chad Caddie
Chris Folleras

A) Project Backlog

Overall Goals:

- Create custom graphics for GUI. Buttons, backgrounds, text fields, etc.
- Finish overall GUI layout.
- Link pages with button controls
- Create general naming conventions throughout objects for ease of use in the future
- Allow longer windows to be scrollable

Current Week:

- Met with team and discussed goals
- Created week, winner, and results pages
- Created custom graphics for assets in windows
- Linked all pages
- Finalized layouts
- Began background logic code
- Began custom sounds for application

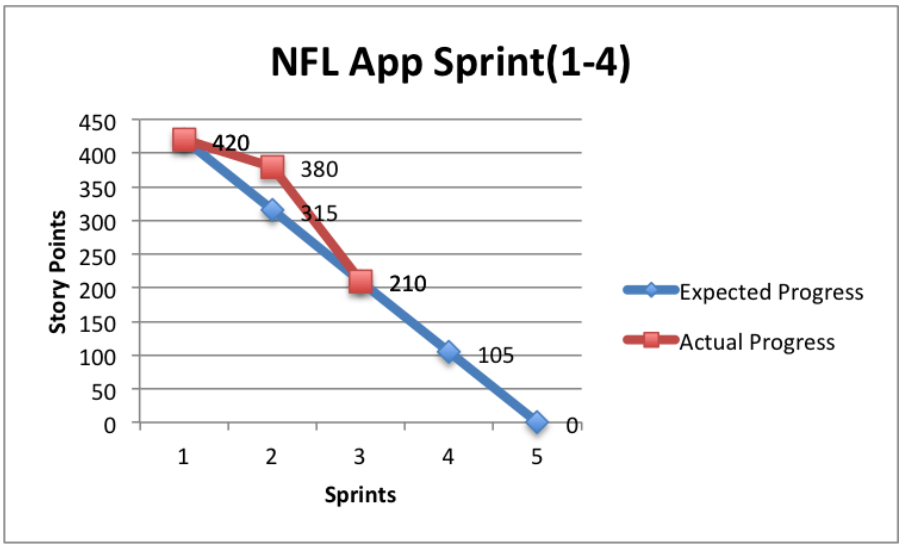
B) Subsequent Week Project Backlog:

- Base new database off one in existing old project
- Start database code
- Begin linking database queries with fields in app
- Begin displaying information in app
- Continue background logic code

C) Sprint BackLog(user stories):

- Bryce Schumacher
  - Finished creating week, winner, and results pages.
  - Finalized layouts
  - Worked with Chad on ideas for graphics
  - Finalized page display logic
  - Helped Saif on SQLite database.
  - Wrote sprint-2.
- Saifil Ali
  - Began research on database code.
  - Started custom sound implementation
  - Helped Bryce with control logic
  - Insert stuffed on development log on wiki page.
  - Created a NFLAPPVideo.mp3 for demo.
  - Started working on SQLite database.
- Chris Folleras
  - Created presentation powerpoint
  - Updated and managed design documents
  - Helped Saif on SQLite database.
- Chad Caddie
  - Created custom graphics for application
  - Helped Bryce with layouts for pages
  - Helped Saif on SQLite database.

D) Burndown Chart:



On the burndown chart pictured above, the team started a project that was planned to be four sprints. They began with 420 story points of work. To finish within four sprints, they planned to average 105 points per sprint. The first week was little rough, we ended up with 380 points left(just completed 40 points). But, the second week output was pretty good. I was very satisfied with my teammates. During sprint 2, we completed 170 points, leaving 210 points left. Now, as you can see in burndown chart that our actual progress matches with expected progress.

E) Scrum Master Notes(status,plans,issues): Our team nominated Saifil as a scrum master. As such, he will manage project details, progress specifics, and individual required features needed for the application.

Week One

- Week one we had several issues installing the Android Studio. After much effort we were able to get it running. Once installed we familiarized ourselves with the program and created a base project to build off of. Once this was completed we built a homepage for our app and outlined subsequent pages to be completed in the coming week.

Week Two

- In week two, after struggling to get Android Studio working on our computers, we have managed to maintain a steady workflow. The application GUI design portion is almost entirely completed. We still have minor tweaks to be done on the front end but the app is in a functional position and is ready to begin integration with database work. Our goal for the next scrum is to get our database to a functional point and begin testing with our GUI. By getting both the GUI and the database to a passable level, we will be able to spend the final scrum polishing our app and tweaking our prediction algorithms.

F) Summary Report(End of week SCRUM):

- **Review:** Status report after week two shows promise. App development is back on schedule, with the team working very efficiently with each other. Team member roles have developed naturally and have ultimately led to a more conducive work environment. It is our hope that in the next two scrums we can continue to capitalize off of the strength of our team and finish all our goals on or ahead of schedule.

- **Demo Status:** Full app with flow control logic and some custom sounds is presentable. More tweaking will be done to interface, but it is now on a functional level.

G) Demo Code:

Demo code has been uploaded to ecampus and a short video of app usage has been submitted as well.

H) Individual Team Report Document:

Bryce: Wrote sprint 2, linked all the gui pages, finished GUI layout, finished GUI control logic, and inserted Chad's custom graphics.
Saifil: Wrote sprint 2 Part D,H, implemented music, sound on buttons and background, wrote short sample code for database.
Chris: finished powerpoint for the group presentation, helped on writing sprint2, helped saif on making demo code video.
Chad: made graphical images for all the buttons,textbox, and background, made app icon, made graphical homepage for wiki on github.

References:

https://www.youtube.com/watch?v=XU0llRltyFM
https://www.youtube.com/watch?v=9TycLR0TqFA
http://www.tutorialspoint.com/android/android_sqlite_database.htm

Sprint - 3
Project Avalanche

Team Members:
Bryce Schumacher
Saifil Ali
Chad Caddie
Chris Folleras

A) Project Backlog

Overall Goals:

- Revamp GUI with more cohesive theme, better graphics
- Finish GUI detailing, such as spacing, symmetry, and appeal
- Try to finish Database code
- Work on various backend programming
- Fully link sounds in the app, such as button clicks

Current Week:

- Met with team multiple times and discussed goals
- Created the rest of the GUI needed
- Finished linking the pages with the new elements
- Nearly finished the database code, without linking it
- Used sample database to test new database code
- Ran through weeks and games
- Worked on various bugs (crashing, large graphics, audio cutoff glitch, etc)

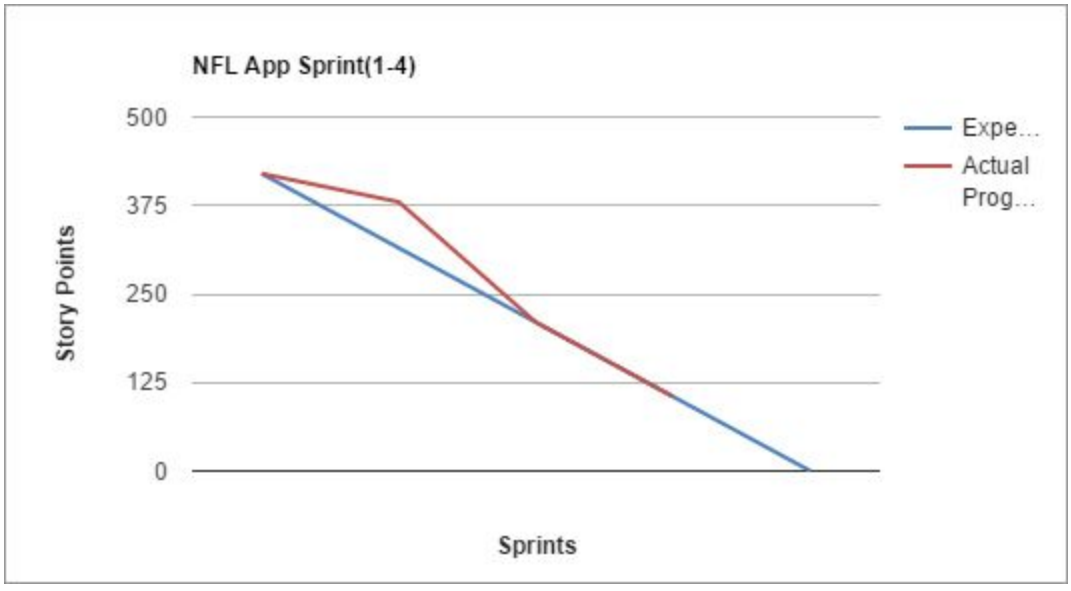
B) Subsequent Week Project Backlog:

- Finalize Database code
- Link fields with database queries fully
- Continue working on displaying information in app
- Continue background logic code
- Bugfixing

C) Sprint BackLog(user stories):

- Bryce Schumacher
  - Updated week GUI page by fixing spacing
  - Imported new graphics made by Chad
  - Attempted to fix home button crash
  - Edited old DB files to be given to Saif
- Saifil Ali
  - Created sample DB
  - Imported old DB files into new system
  - Began working with SQL light to import new database
  - Worked with peer teacher to understand db concepts
  - **etc...**
- Chris Folleras
  - Edited powerpoint for presentation
  -
  -
- Chad Caddie
  - Created new custom buttons for show results and next
  - Worked with Bryce on GUI and Layout, as well as overall look and UI
  - Edited home page graphic in an attempt to solve crash problem
  - Lead editor for scrum 3
  - Recorded and edited demo video for sprint 3

D) Burndown Chart:



E) Scrum Master Notes(status,plans,issues):

Week One

- Week one we had several issues installing the Android Studio. After much effort we were able to get it running. Once installed we familiarized ourselves with the program and created a base project to build off of. Once this was completed we built a homepage for our app and outlined subsequent pages to be completed in the coming week.

Week Two

- In week two, after struggling to get Android Studio working on our computers, we have managed to maintain a steady workflow. The application GUI design portion is almost entirely completed. We still have minor tweaks to be done on the front end but the app is in a functional position and is ready to begin integration with database work. Our goal for the next scrum is to get our database to a functional point and begin testing with our GUI. By getting both the GUI and the database to a passable level, we will be able to spend the final scrum polishing our app and tweaking our prediction algorithms.

Week Three

- In week three, we were making good progress. The frontend was almost entirely done, and work was also simultaneously done on the backend. The graphics were entirely redone, and made to match a common theme, with more graphics being made for new elements. The database is in a good place, and next week we plan to link and integrate it into the app. We also plan to work on the actual pulling of data, and displaying that data on the actual app. The framework is all there and we will most likely easily meet deadlines. We did run into some issues with the app crashing after a few certain situations that will likely be fixed in the next sprint.

F) Summary Report(End of week SCRUM):

- **Review:** Work is continuing as planned, with efficiency in the team despite other projects and exams coming up. We hope to be done early, with time to spare for bugfixing, general improvements, and adding extraneous features.

- **Demo Status:** Able to currently run the UI for the app. Not much has been added to the front end but extensive work has been done on the database side of the project.

G) Demo Code:

Demo code has been uploaded to ecampus and a short video of app usage has been submitted as well.

H) Individual Team Report Document:

Bryce: Fixed week page display problems, imported buttons, debugged home page

Saifil: Began doing main DB work, did debugging on DB, attempted integration with GUI
Chris: Edited power point, and was in charge of presentation
Chad: Worked on scrum, GUI, graphics for GUI, did research, bugfixing.

References:

https://www.youtube.com/watch?v=XU0llRltyFM
https://www.youtube.com/watch?v=9TycLR0TqFA
http://www.tutorialspoint.com/android/android_sqlite_database.htm

Final Sprint - 4
Project Avalanche

Team Members:
Bryce Schumacher
Saifil Ali
Chad Caddie
Chris Folleras

A) Project Backlog

Overall Goals:

- Fix GUI issue with memory allocation crashing the app after too many pages
- Turn edittext spaces into pressable buttons, and then turn those buttons into a system that disallows multiple selections and stores the user's selection
- Merge database with GUI fully, and fix the week detection bug
- Work on mathematical prediction logic
- Fix minor bugs and test app (attempt to break it, so that bugs are accounted for)
- Finish and prepare the app to be 100% ready to present

Current Week:

- Met with team multiple times and worked together on what each person was struggling with the most
- Use case system to disallow multiple picks, and also prevent user from backtracking and changing answers
- Actually finished the database code linking
- Finished mathematical prediction logic
- Ran through weeks and games to ensure it actually worked
- Extensively tested the app to ensure it worked 99% of the time and to identify any bugs
- Fixed nearly all the various bugs and "to-dos" (crashing, color indexing in graphics to cut down on filesize and ram usage, week and byeweek misalignment, etc)

B) Final Project Backlog (Things that missed the cut, or future features):

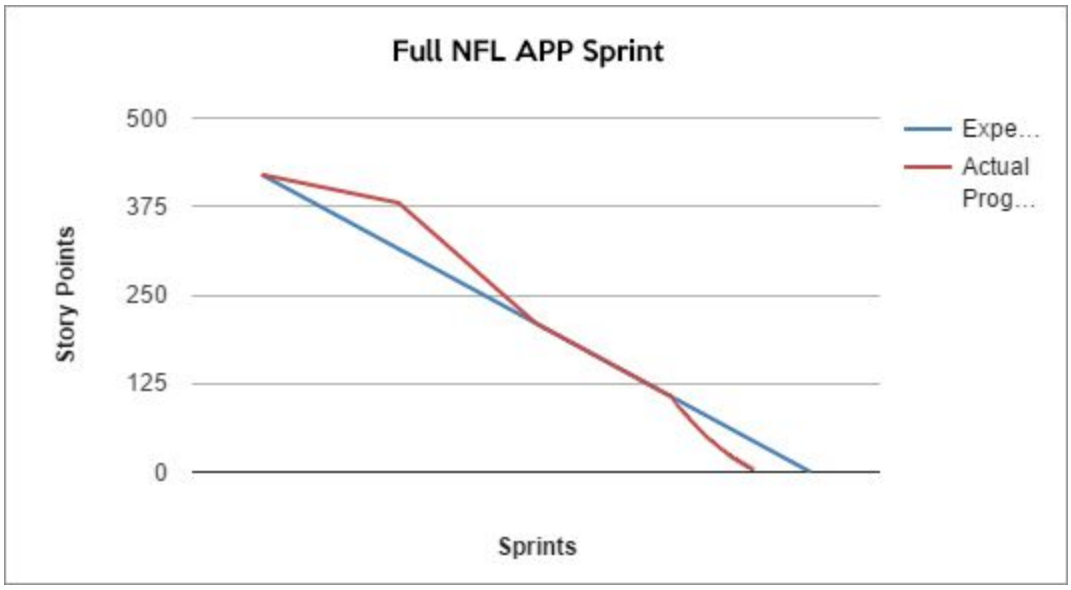
- More animations
- Better memory management (not just the bitmaps)
- Multi-phone support
- More "game features" like leaderboards, rewards, win conditions (say at about each 5% accuracy the user gets a different message is displayed), and Dr. Ward's "marketing hat" strategies to bring it from a utility app to a true game
- Helmets or logos beside the text representation of the team

C) Sprint BackLog(user stories):

- Bryce Schumacher
  - Helped solve the “button problem” mentioned above where we prevent the user from cheating, selecting more than one, and making it apparent which choices were made. Also tied it to the tallying system that compares the actual vs user selected teams, made selections of color and edited the xml accordingly
  - Imported Chad’s graphics into the main project file being passed around.
  - Finalized the GUI, XML, and added GUI centric code to the java files
  - Helped everyone out on their own problems
- Saifil Ali
  - Did a lot on the backend, much of the logic that deals with the database is attributed to Saif
  - Group’s ambassador to the peer teacher to understand db concepts as well as new concepts
  - Worked out the mathematical concepts with the group and then coded the prediction systems in (such as pi ranking)
  - Coded much of the system with and without the group’s help
  - Spent long hours in open access labs working on research and code
  - **etc...**
- Chad Caddie
  - Changed around some of the buttons and graphics to enhance user understanding and experience
  - Worked with Bryce on GUI and Layout, as well as overall look and UI
  - Helped Bryce on the solving the “button problem” mentioned above where we prevent the user from cheating, selecting more than one, and making it apparent which choices were made. Also helped tie it to the tallying system that compares the actual vs user selected teams
  - Solved the graphic crashing problem, it was due to a memory allocation fault. We assumed the previous pages were automatically wiped since you couldn’t “see” them, but really they existed in memory and kept building upwards until the user was done or a crash happened. Did some lengthy research here since we were thrown off by thinking the graphics were the sole cause.
  - Imported my own graphics to do testing, but Bryce often was the one who swapped out fixes and new parts in the true project.

    - Scrum master and editor for Final Sprint
    - Recorded and edited demo video for final presentation (Adobe Premiere pro / Photoshop)
    - Generally aided the others in making this app successful and solving problems
- Chris Folleras
    - Edited powerpoint for final presentation

D) Burndown Chart:



As the scrum burndown shows, we finished a little ahead of schedule, with only smaller fixes towards the end. We got ahead after the database was integrated into the app.

E) Scrum Master Notes(status,plans,issues):

Week One

- Week one we had several issues installing the Android Studio. After much effort we were able to get it running. Once installed we familiarized ourselves with the program and created a base project to build off of. Once this was completed we built a homepage for our app and outlined subsequent pages to be completed in the coming week.

Week Two

- In week two, after struggling to get Android Studio working on our computers, we have managed to maintain a steady workflow. The application GUI design portion is almost entirely completed. We still have minor tweaks to be done on the front end but the app is in a functional position and is ready to begin integration with database work. Our goal for the next scrum is to get our database to a functional point and begin testing with our GUI. By getting both the GUI and the database to a passable level, we will be able to spend the final scrum polishing our app and tweaking our prediction algorithms.

Week Three

- In week three, we were making good progress. The frontend was almost entirely done, and work was also simultaneously done on the backend. The graphics were entirely redone, and made to match a common theme, with more graphics being made for new elements. The database is in a good place, and next week we plan to link and integrate it into the app. We also plan to work on the actual pulling of data, and displaying that data on the actual app. The framework is all there and we will most likely easily meet deadlines. We did run into some issues with the app crashing after a few certain situations that will likely be fixed in the next sprint.

Final Sprint

- In the final sprint, we made even better progress. The frontend was basically done (besides the transferring of the text boxes to buttons for ease of use), so work focused on bugfixing, and the rest of the backend. The prediction method's math needed done, the database needed to correctly mesh with the GUI and know which week it was on (bye weeks messed it up originally since we just filled by numbers at first). The graphics were done, but a couple buttons were modified to make more sense. The crashing problem was solved, and it was something that neither us, the peer teacher, or the TA were originally trying to fix - memory management of the pages loading graphics over and over. The original filesize was likely fine, but we did an indexed color scheme and interlacing to reduce them without sacrificing quality. The app finished with a couple of hiccups along the way, and it was very time consuming, not only to implement code, but also to understand some concepts and android studio functions. At the time of writing, this app is 99% done (we have to draw the line somewhere to avoid feature creep, and we feel as if it is in a good place)

F) Summary Report(End of week SCRUM):

- **Review:** Work was smooth, and despite the lengthy process to make it happen, it got done as planned and even slightly early. We weren't working until the last minute rushing. Our team was efficient and effective despite other projects and finals close on the horizon.

- **Demo Status:** Incredibly close to ready, we just need to prepare and review our powerpoint and how exactly we will demonstrate it.

G) Demo Code:

Demo code has been uploaded to ecampus and a short video of app usage has been submitted as well. All relevant documents will be there too.

H) Individual Team Report Document:

Bryce Schumacher: Helped solve the "button problem" mentioned above where we prevent the user from cheating, selecting more than one, and making it apparent which choices were made. Also tied it to the tallying system that compares the actual vs user selected teams, made

selections of color and edited the xml accordingly. Imported Chad's graphics into the main project file being passed around. Finalized the GUI, XML, and added GUI centric code to the java files. Helped everyone out on their own problems.

Saifil Ali: Did a lot on the backend, much of the logic that deals with the database is attributed to Saif. Group's ambassador to the peer teacher to understand db concepts as well as new concepts. Worked out the mathematical concepts with the group and then coded the prediction systems in (such as pi ranking). Coded much of the system with and without the group's help. Spent long hours in open access labs working on research and code. *etc...*

Chad Caddie: Changed around some of the buttons and graphics to enhance user understanding and experience. Worked with Bryce on GUI and Layout, as well as overall look and UI. Helped Bryce on the solving the "button problem" mentioned above where we prevent the user from cheating, selecting more than one, and making it apparent which choices were made. Also helped tie it to the tallying system that compares the actual vs user selected teams. Solved the graphic crashing problem, it was due to a memory allocation fault. We assumed the previous pages were automatically wiped since you couldn't "see" them, but really they existed in memory and kept building upwards until the user was done or a crash happened. Did some lengthy research here since we were thrown off by thinking the graphics were the sole cause. Imported my own graphics to do testing, but Bryce often was the one who swapped out fixes and new parts in the true project. Scrum master and editor for Final Sprint. Recorded and edited demo video for final presentation (Adobe Premiere pro / Photoshop). Generally aided the others in making this app successful and solving problems.

Chris Folleras: Edited powerpoint for final presentation, talked with Saifil to help get some backend done.

References:

http://developer.android.com/training/index.html
https://www.youtube.com/watch?v=XU0llRltyFM
https://www.youtube.com/watch?v=9TycLR0TqFA
http://www.tutorialspoint.com/android/android_sqlite_database.htm
http://stackoverflow.com/questions/10200256/out-of-memory-error-imageview-issue