1. Name: Toshal Ghimire

**2. Project description:** An android app designed to used by fantasy football players in order to research team stats, get live depth chart, league news and injuries updates.

DEMO: <a href="https://www.youtube.com/watch?v=J3jaws8nDek&feature=youtu.be">https://www.youtube.com/watch?v=J3jaws8nDek&feature=youtu.be</a>

# 3. List the features that were implemented (table with ID and title).

All features that I originally planned on implementing were implemented. With some additional features as well

#### **Features**

U-01	Browse teams	A user can scroll through all 32 NFL teams.
U-02	Search teams	A user can search for a specific NFL team .
U-03	View team	A user can view an NFL teams stats and depth charts.

### **Additional Features**

U-04	View News	A user can view the 10 latest news articles from the nfl
U-05	View Injuries	A user can view the 10 latest injuries of players around the league

# 4. List the features were not implemented (table with ID and title).

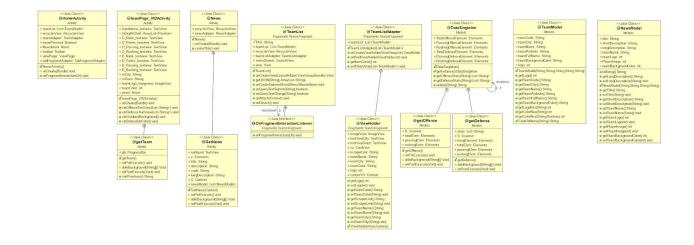
Even though all features that I said I would add were implemented there are two additional features which I would like/will implement in the future:

U-06	View Schedule	Users should be able to view to current NFL schedule for the week
U-07	View Standings	Users should be able to view current NFL standings

# 5. Show your final class diagram.

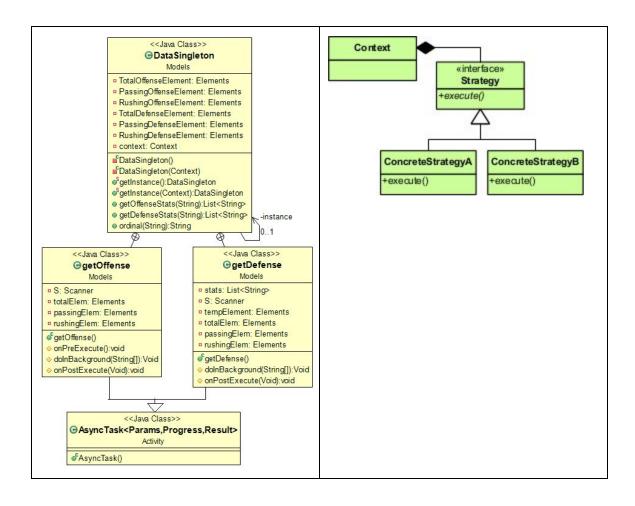
What changed? Why? If it did not change much, then discuss how doing the design up front helped in the development.

From my first diagram to to the current one I went from 5 classes to have 14. This is because added a lot of additional features, like injury and news page, and thus I needed more classes.



#### 6. Design pattern implemented,

From my Demo video you saw that I chose to implement the strategy design pattern, inside a singleton object. The image on the left is of my class diagram, and the image on the right is a diagram of the strategy design pattern. The class on top was my singleton and the two classes in the middle, getOffense and getDefense, are classes that extends from the built in Android class AsyncTask which is the parent of these two concrete Strategy classes . The purpose of these classes was to get stats on NFL teams. I used the strategy pattern because I knew the logic for getting offensive stats were different from getting the defensive ones. These two child classes are part of the strategy design pattern and are used inside the singleton.



# 7. What have you learned about the process of analysis and design now that you have stepped through the process to create, design and implement a system?

To me the most important process I learned through this project is the proper use of UML. With proper planning and clear UML diagrams we can help make software development process a lot easier. UML also helps when someone new is working on the codebase understand how the code is structured.

This projects (and this class in general) was a great experience for me, because i expanded my knowledge of using UML diagrams to plan for a project.