

## Project Purpose

Baseball is an awesome sport. There's a lot of strategy involved and, when you know what's going on, a lot of excitement. Unfortunately, there's a decently-steep learning curve for anyone new to the sport, especially when it comes to statistical terminology. We aim to build a fantasy baseball app that not only allows people to compete against their friends to build the best baseball teams possible, but educates users on how baseball is played and why certain statistics are important.

## Use Cases

### General Cases

1. Generic Competition
  - a. As the baseball season starts, a group of coworkers wants to have a challenge to see who can create the most successful fantasy baseball team. They download our app/visit our site, create accounts, start a competition, and set to work building their teams and tracking stats throughout the season.
2. Educational Competition
  - a. A man wants to challenge his younger brother to a fantasy match at the start of a season. His brother is reluctant until he discovers our app and agrees to compete since he feels confident he will understand what is happening with the help of our explanatory product.

### Specific Cases

1. Tom is playing our game and finds he doesn't understand the importance of a batting average or how it is calculated. He is able to quickly pull up a short help section and learn the reason behind the important statistic. Tom is now more prepared to build a better team.
2. The application will pull live data from a number of sources to keep the database populated with the most up-to-date stats. Push notifications can be sent when a player does well or general fantasy team stats change by a defined amount.

## Stakeholders

## Direct

1. Baseball fans - Long time baseball fans will have yet another venue to celebrate their love of the game.
2. Soon-to-be baseball fans - Though they may not know it yet, our app will help regular people become fans of baseball and its many beautiful complexities.
3. Developers - Anyone maintaining the open-source system will have to fix problems as they arise.

## Indirect

1. Baseball players - More exposure means more money.

## Database Schema

```
League(  
    leagueID,  
    name  
)  
  
User(  
    userID,  
    email [emailID],  
    password [passwordID],  
    standing  
)  
  
Email(  
    emailID,  
    screenname,  
    domain  
)  
  
Password(  
    passwordID,  
    hash  
)  
  
Friendship(  
    friendshipID,  
    user [userID],  
    user [userID]  
)  
  
Team(  
    teamID,  
    mascot [mascotID],  
    logo [logoID],  
    name,  
    ownerName  
)
```

```
Mascot(  
  mascotID,  
  name  
)  
  
Logo(  
  logoID,  
  file  
)  
  
Pitcher(  
  pitcherID,  
  saves,  
  innings,  
  WHIP,  
  ERA,  
  player [playerID]  
)  
  
Batter(  
  batterID,  
  onBasePercent,  
  battingAverage,  
  strikeOuts,  
  slugPercent,  
  player [playerID],  
  hit [hitID],  
  atBat [atBatID]  
)  
  
Hit(  
  hitID,  
  singles,  
  doubles,  
  triples,  
  homeRuns  
)  
  
AtBat(  
  atBatID,  
  count  
)  
  
Player(  
  playerID,  
  age,  
  gameCount,  
  wins,  
  name [nameID],  
  position [positionID]  
)  
  
Name(  
  nameID,  
  firstName,  
  middleName,  
  lastName
```

```
)  
  
Position(  
  positionID,  
  positionName  
)
```

