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CSE134B HW1

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Executive Overview

Our proposed web application, NBADex, allows basketball fans to create, manage and simulate their own personalized NBA team. NBADex gives users power to be creative and savvy then compare their chosen team to the rest of NBA fans who use our application.

Motivation:

1. As a basketball fan, users want to see if they can be NBA general managers
2. Users want to see how well their teams are evaluated over a 82 game season
3. Users want to see how well their teams are evaluated against other NBA fans
4. User are interested in the statistics of NBA players

Features:

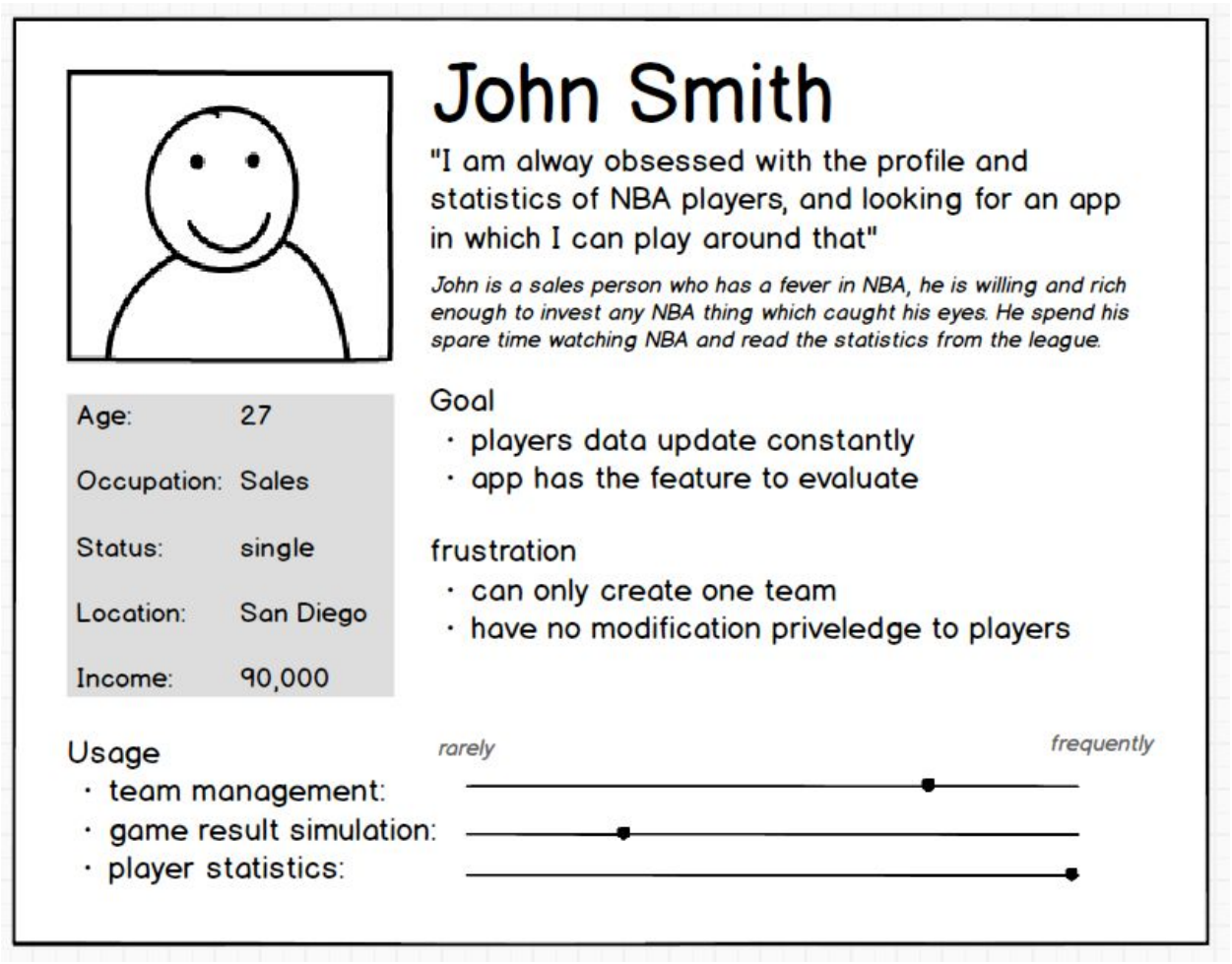
1. Create a personalized team based on a repo of NBA players and a set amount of money
2. Update the team based on a user's preference and/or leftover money
3. Simulate an NBA season's record based on the chosen team
4. Compare and show performance of user's team to other users of the application
5. View individual player statistics
6. Administrators can create/update/delete players profiles (normal user use do not have the privilege to modify the players data, what they can do is create their own team, and custom it by filling it with the players Administrator created.)

User Thinking:

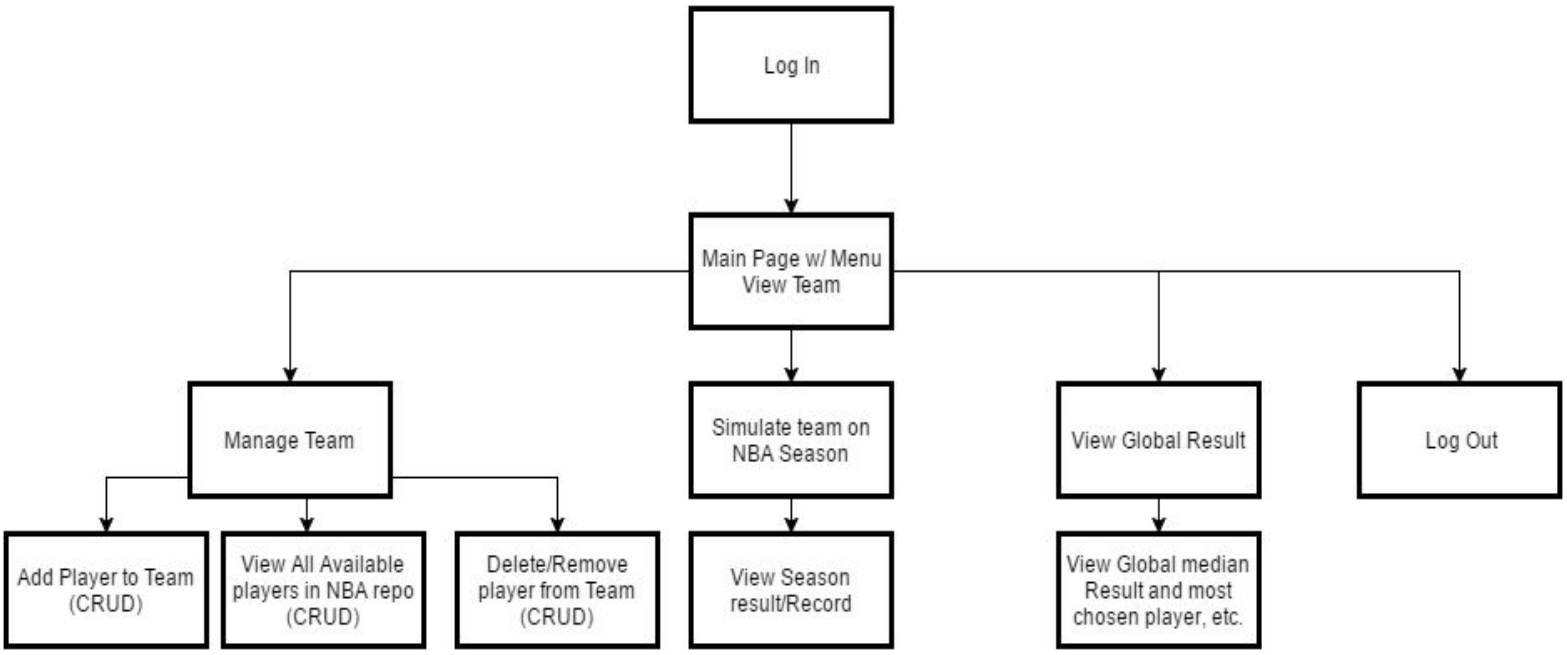
The primary users of the NBA dex will be NBA fans. A common argument among NBA fans is which players are the best or who is in the top 10 greatest of all time. However, these fans don't usually have statistics organized in front of them and don't have an objective way to determine which players are better. The NBADex fills this need by allowing users to view a collection of NBA player statistics, compare them side-by-side, and create a team of their top 10 favorite players. However, each user is only given a set amount of credits/money and each player costs a different amount depending on how good they are. The user must use his/her credits wisely to build a team. From this team, the NBADex will analyze the player statistics (points, rebounds,

efficiency rating, etc.) and use an algorithm to score the team, simulate a regular season record, and compare it with all other users' collections. Users can compare their top 10 with their friends to help settle debates on whose team is the best. The NBADex provides a solution for the casual fan who is curious about a player's stats and/or who wants to see if they have what it takes to be a successful NBA team general manager.

sample user persona for NBADex:

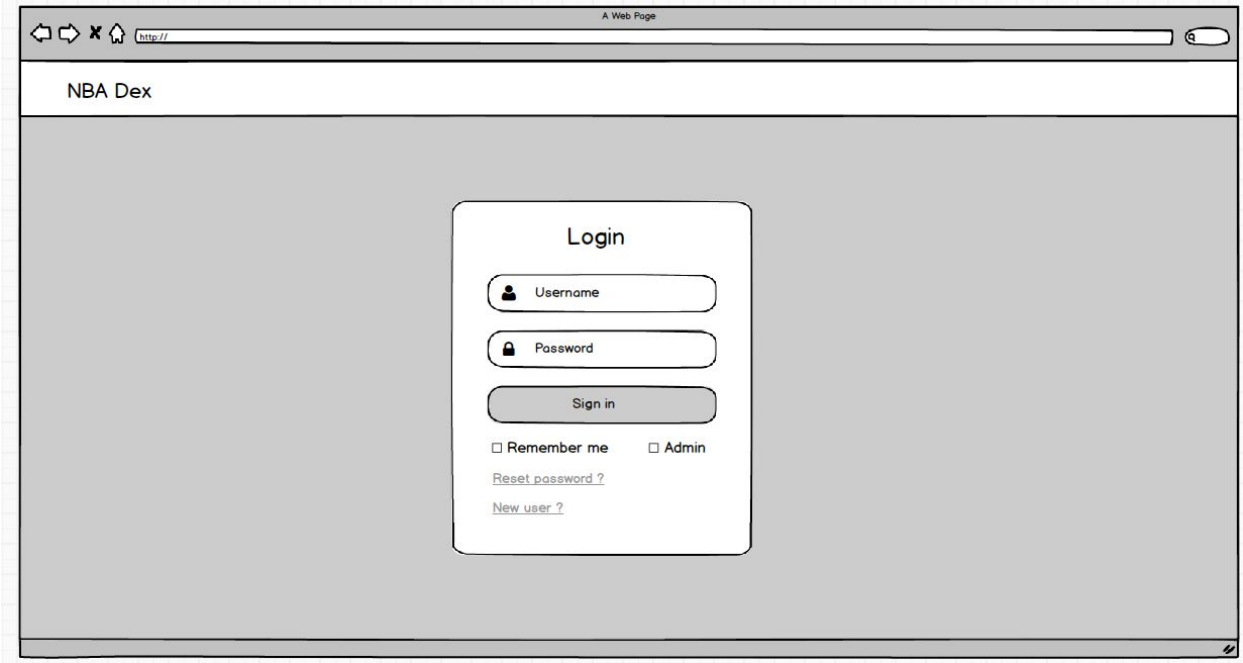


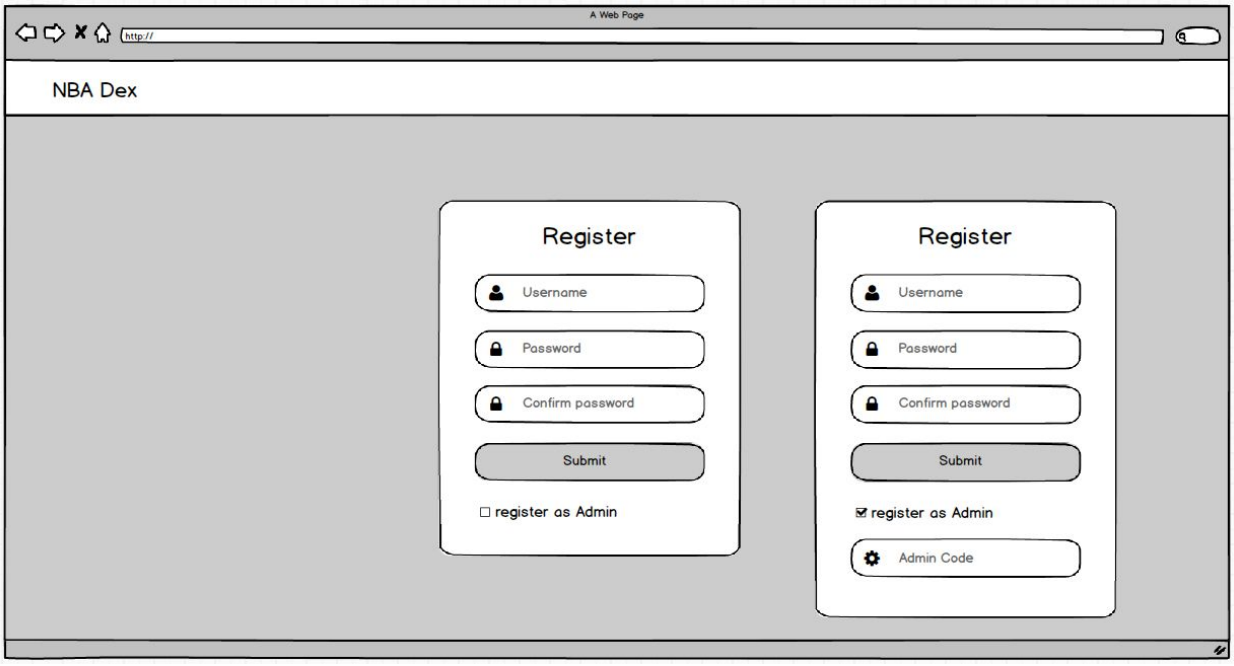
Flow Chart:



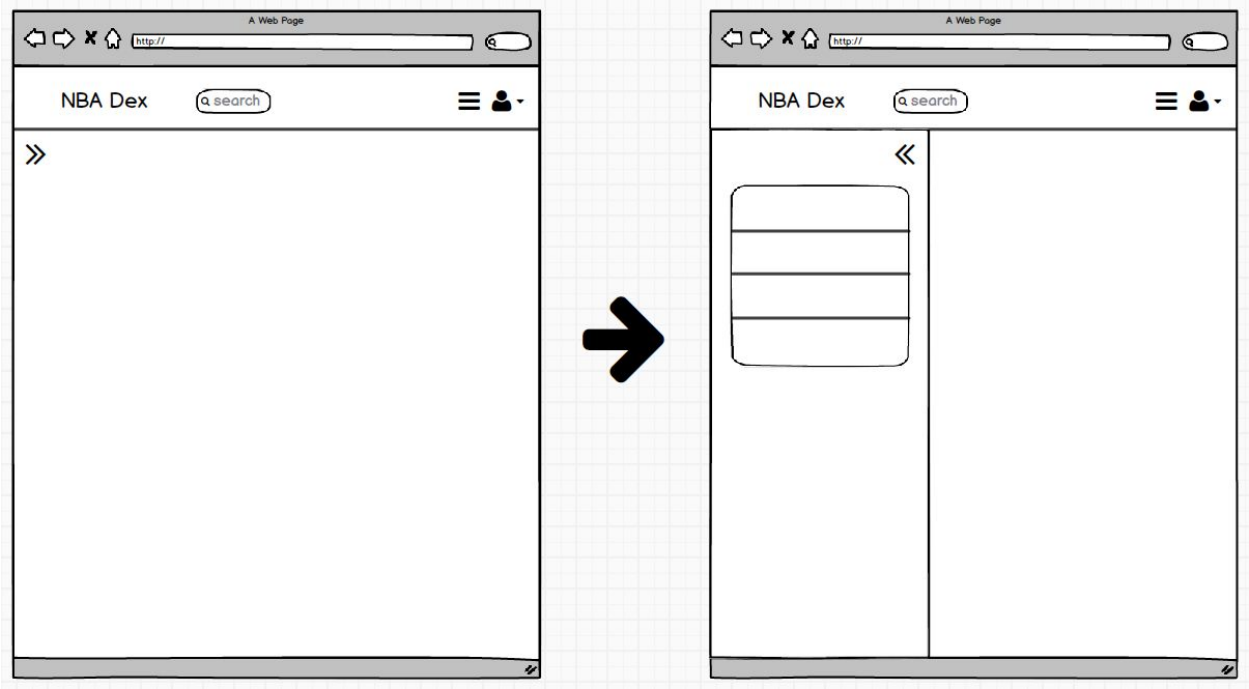
Wireframe:

Login / Registration

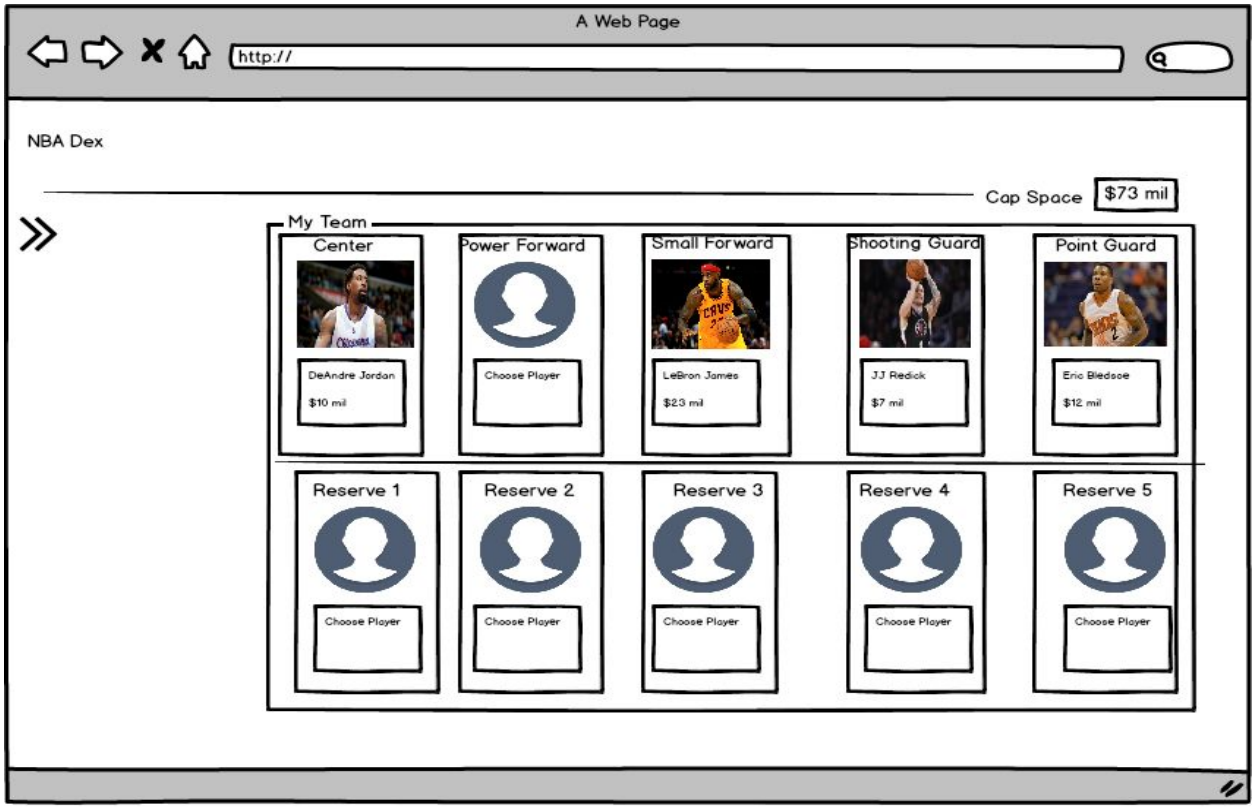




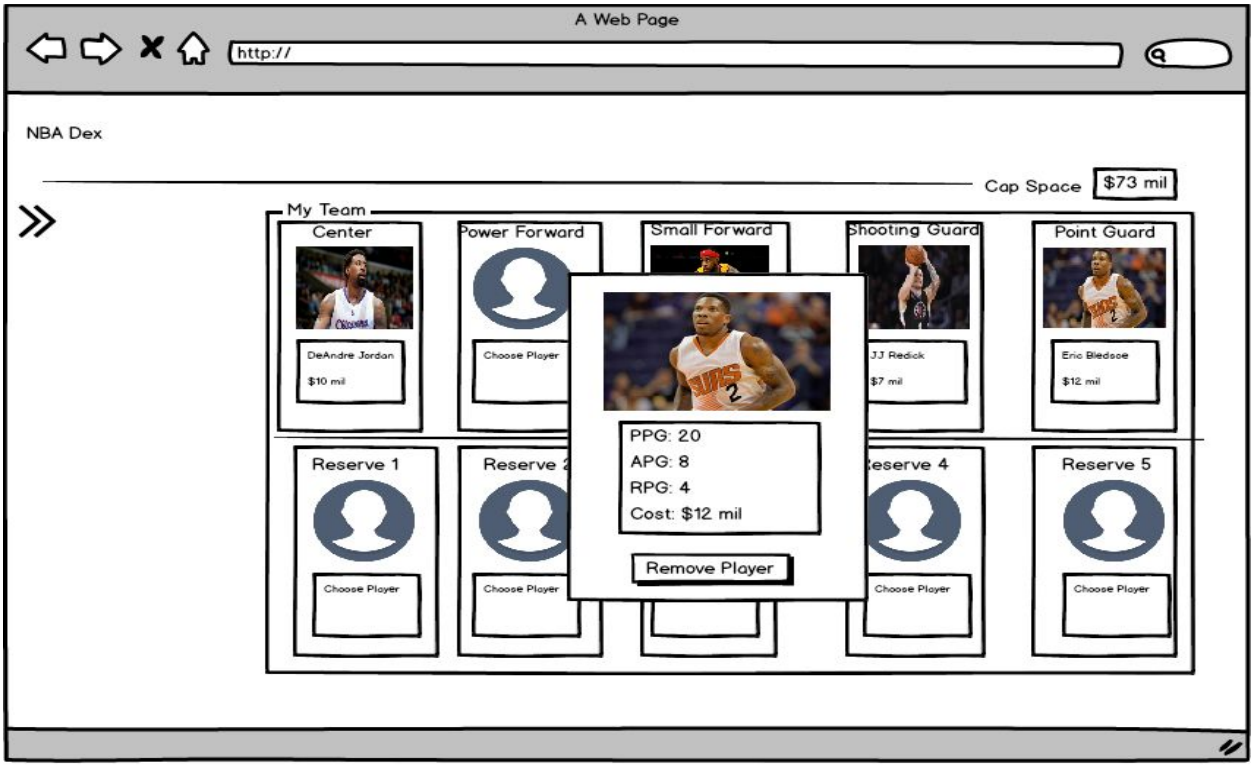
Side Bar



Main Page, view Team

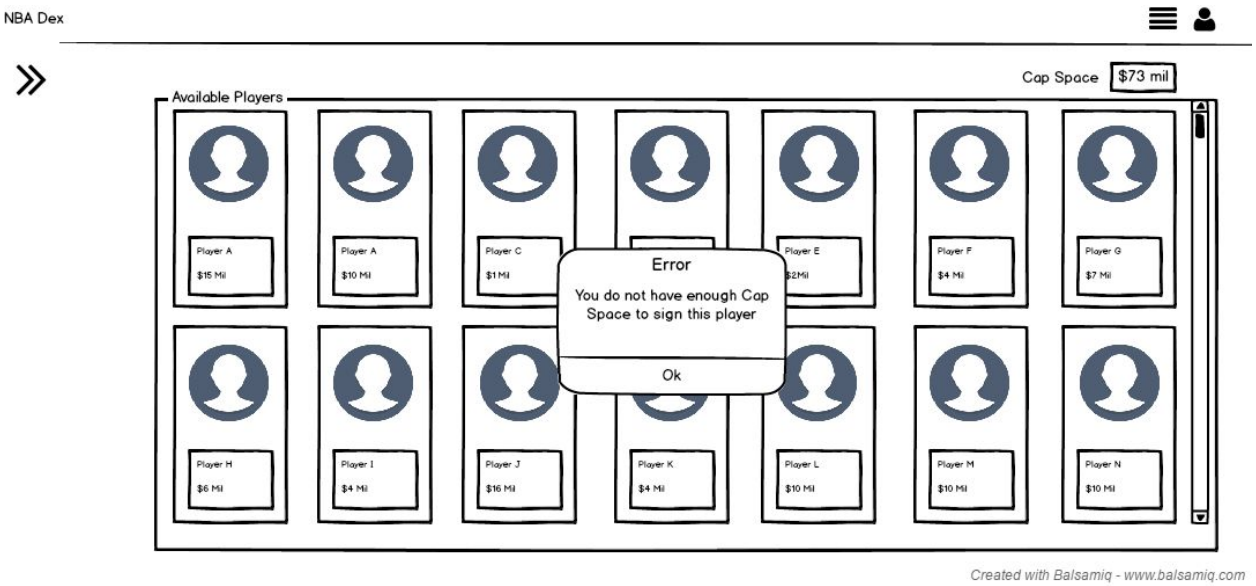


Created with Balsamiq - www.balsamiq.com

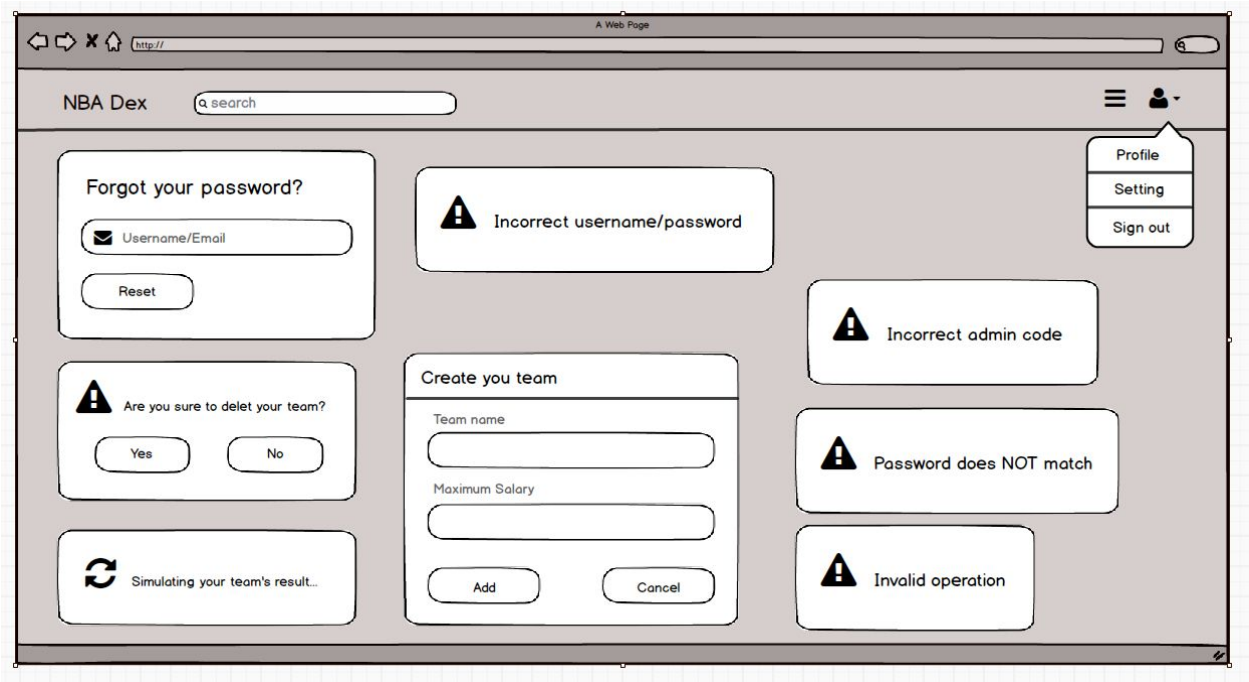


Created with Balsamiq - www.balsamiq.com

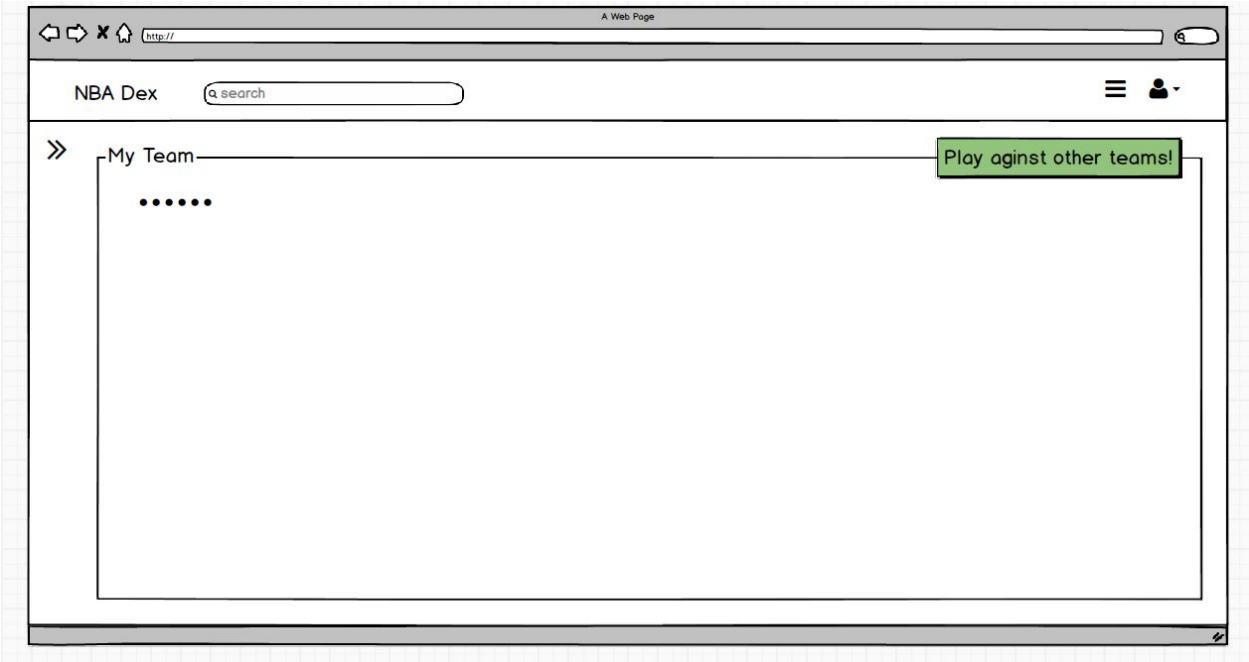
Manage Teams / Add Players into team (CRUD on team)

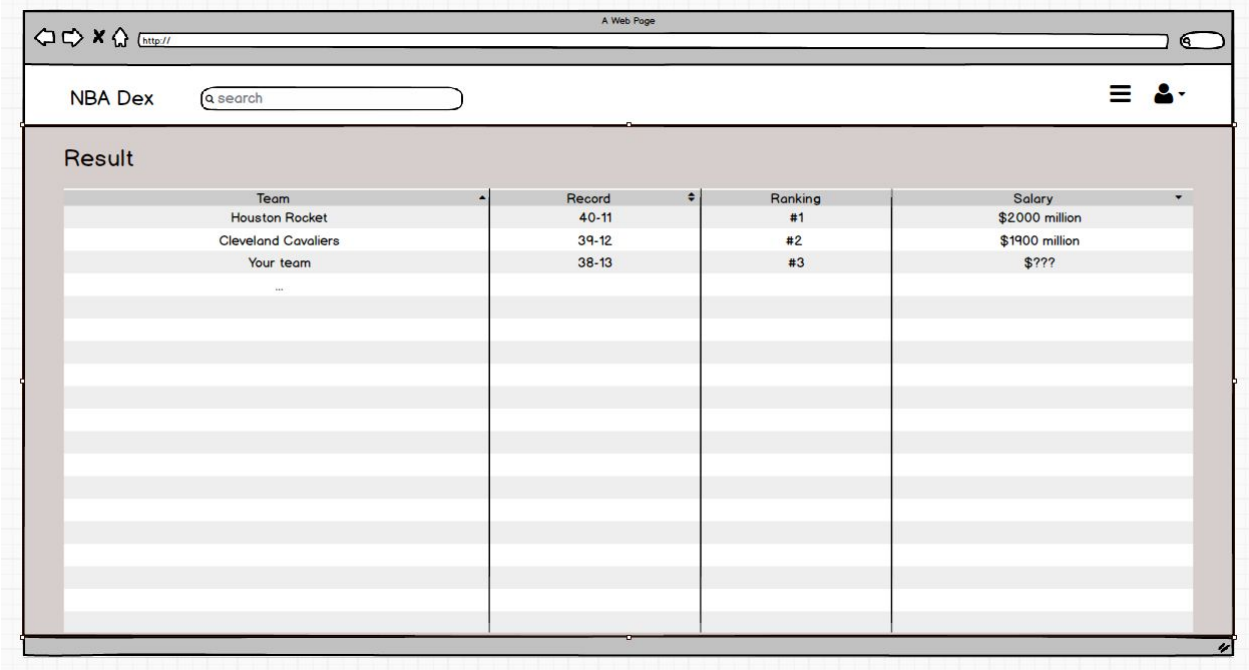


Utility Box

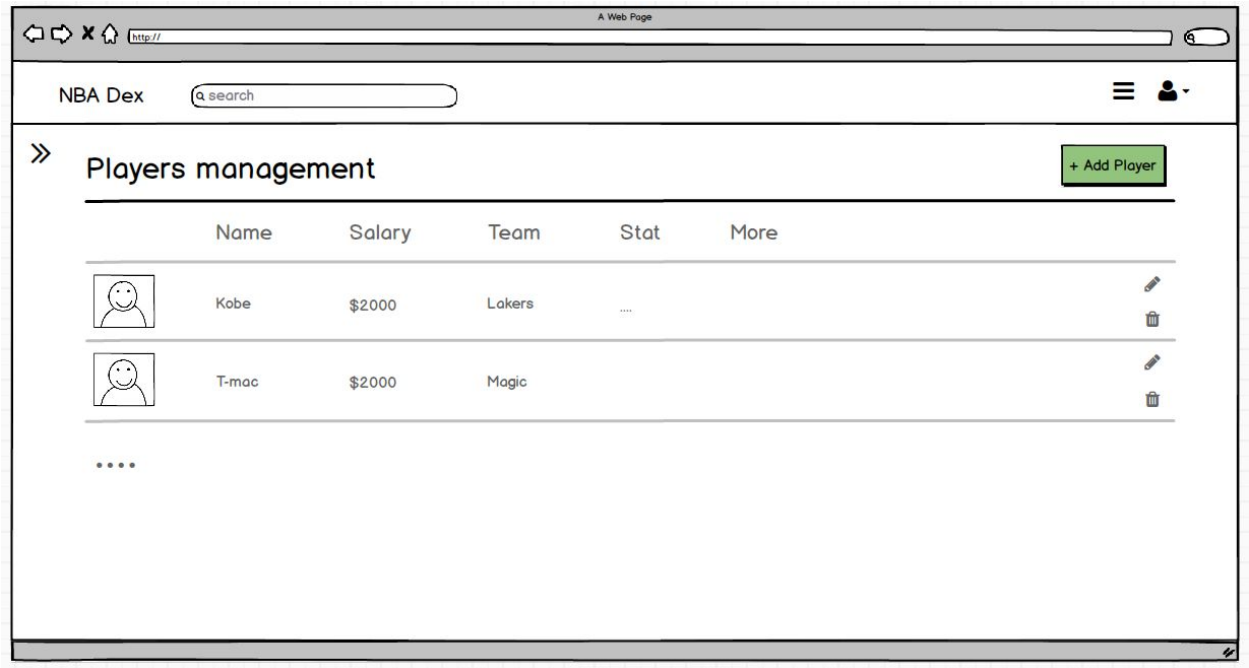


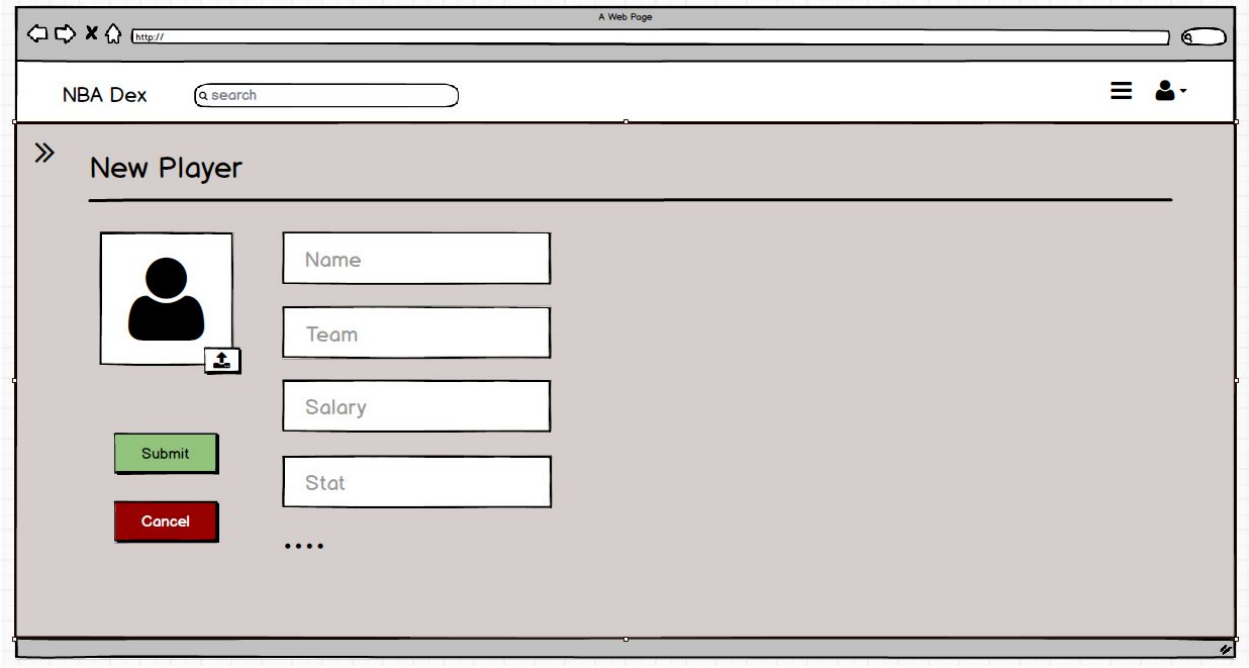
Simulation w/ season result





Unique features under Admin user: CRUD on players pool





Strengths/Risks/Weaknesses/Execution Evaluation:

Strengths:

- No known pre-existing NBA Dex application (i.e. No competitors).
- Other than the main feature of adding players to a team, other features are complementary. Thus we can prioritize the main feature.
- A fun and enjoyable app that can be used to show recruiters when looking for jobs

Risks:

- Unable to gauge the difficulty of implementing the back-end of the application
- May take a long time to gather data from Firebase and display global statistics
- Unsure of how to exactly implement the player cost system

Weaknesses:

- Algorithm to calculate player and team rankings is imperfect.

- There is no real productive use for this application
- player data cannot be frequently updated.

Execution:

- Using Firebase we can create and update the player profiles
- Also with Firebase, each user will have his/her own tree with their respective team when they log in
- The player cost accounting will also have to be used through Firebase