# CS 307: Team 23 Product Backlog
## *Bench*

## Team members
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## Project Title
*Bench*

## Problem Statement
Existing social networking applications are not optimal for expanding the horizons and networking of professional and leisure athletes in terms of the activities they participate in. Bench provides a new social networking platform designed for sports enthusiasts to connect with each other. It aims to find matches in an accurate and efficient manner by taking various factors into account, including sports type, user availability, and skill level.

## Background Info:

### Audience
Finding peers with the same interest as you is hard, especially when it comes to sports. There are two groups of people who will benefit from *Bench*. On one hand, all sports enthusiasts can take advantage of the matching feature of *Bench* and find buddies or additional teammates to enjoy sports experiences together. On the other hand, *Bench* also gives great opportunities to people who want to go beyond their comfort zone and explore new sports.

### Similar Platforms
Existing softwares that have similar features as *Bench* are SportsBuddy and GW Sports. Both applications have matching features, however, there are a few differences across the board. SportsBuddy and GW Sports try to match people on the basis of sport and distance. GW Sports has a few additional features such as booking sports venues, discovering and registering in sports events.

**Limitations**

While existing platforms have multiple useful features, their UI is neither intuitive nor organized for users to navigate through the application efficiently. SportsBuddy does not have a well-defined category for sports, causing the sorting and matching features in the application to be incorrect and inefficient. Also, users are prompted to pay for the number of matches. The preferences that can be set in both applications are very minimal, which deeply affects the accuracy of matching. Other shortcomings include compatibility issues as well as region limitations.

**Functional Requirements:**

1. As a user, I would like to be advised to visit the welcome page of the web-app.
2. As a user, I would like to be able to create a Bench account.
3. As a user, I would like to be able to log in with my existing Bench account.
4. As a user, I would like to have a settings panel.
5. As a user, I would like to be able to manage my Bench account.
6. As a user, I would like to be able to deactivate/delete my account.
7. As a user, I would like to be able to find my username using my email address.
8. As a user, I would like to be able to reset my password if I forget it.
9. As a user, I would like to upload a local file as my profile picture.
10. As a user, I would like to be able to view and review my profile.
11. As a user, I would like to be able to edit my profile information.
12. As a user, I would like to be able to set my status in my profile.
13. As a user, I would like to change the color theme of the page.
14. As a user, I would like to see the main matching page with a navigation bar.
15. As a user, I would like to view the set of the matched and sorted users on the matching page.
16. As a user, I would like to be able to see a dashboard that shows the user's profile information.
17. As a user, I would like to be able to delete a user in the matching set.
18. As a user, I would like to be able to match with a new user.
19. As a user, I would like to search for a user by name.

20. As a user, I would like to have a filter panel and be able to apply it.
21. As a user, I would like to be able to access other user's social media accounts that are public and listed in their profile.
22. As a user, I would like to see the last time that the user logged in on the user's dashboard.
23. As a user, I would like to be able to view my calendar.
24. As a user, I would like to be able to easily navigate through my calendar.
25. As a user, I would like to edit/personalize my calendar.
26. As a user, I would like to get mail to my registered email account regarding my notifications.
27. As a user, I would like to be able to show/see other user's ratings/reviews for me.
28. As a user, I would like to be able to show/see other user's ratings/reviews.
29. As a user, I would like to give other users reviews, only if I have given a rating.
30. As a user, I would like to be able to show/see the average of rating for a user.
31. As a user, I would like to be able to report a given review.
32. As a user, I would like to see users matching according to the highest ratings.
33. As a user, I would like to be able to set myself anonymous when giving another user reviews.
34. As a user, I would like to be able to edit/delete a review I gave for someone.
35. As a user, I would like to be able to go to the user that is not anonymous that has given a review to my profile or another user.
36. As a user, I would like to block another user.
37. As a user, I would like to be able to send/request messages with a person that I was matched with.
38. As a user, I would like to be able to reply to an incoming message from a matched user.
39. As a user, I would like to be able to show/manage all the chat history.
40. As a user, I would like to be able to share pictures in the chat with a matched person.
41. As a user, I would like to be able to accept/deny an incoming chat request.
42. As a user, I would like to be able to receive a notification when there is a new incoming chat.

43. As a user, I would like to turn off my notifications.
44. As a user, I would like to be able to block a user.
45. As a user, I would like to be able to report a suspicious person in the chat box.
46. As a user, I would like to add an event scheduled with a person I matched with into the Bench calendar.
47. As a user, I would like to be able to easily navigate through the message panel.
48. (If time allows) As a user, I would like to export my event calendar.
49. (If time allows) As a user, I would like to be able to share videos in the message room.
50. (If time allows) As a user, I would like to request another user review/rating from other people.

## Non-Functional Requirements:

### Architecture and Performance
Our plan is to separate the front-end development and the back-end development to help us organize the features. By separating the two ends, we will also avoid compatibility problems, as the backend will use a RESTful API, using Node.js framework. We will use React JS for the front-end development. Firebase will handle all the databases and requests, and Java/Python will sort the data of the users to match one user with other users. The response time of refreshing a match would take more or less than three seconds.

### Scalability
We want *Bench* to first be released on a small scale, such as on campus as a web application. A platform for people with similar interests to interact would be perfect in Purdue, as it is easy to access. We also believe that by having a small scale, the data that we will need to store would not be very big or hard to manage. Furthermore, our feature of finding people around the user, using location, would not be too hard. However, the only limitation is that there may not be a lot of people who will use it if it is only on Purdue campus. Nonetheless, it is easier to implement on a small scale. We would like to increase our scale/radius, as well as

starting to create an actual mobile application from the web application, which we will try to adjust according to the device that the application is on, screen size wise.

## Usability

One of our goals is to create a really interactive interface that would help users to navigate through all the features easily and conveniently. We do not want to add a lot of navigation that is not necessary as we want to keep it simplistic. With the many features that we have, our front-end development would be very crucial. We also would want to create it similar to other social media platforms, to ease the process of getting to know our application. Since *Bench* would be a web application, we want to ensure that our application is accessible on all screen sizes and resolutions, as well as on all browsers

## Security

*Bench* will handle a variety of private information, including sensitive profile data, communication history and more. For such a program, security must be a pivotal role in terms of developing the software. *Bench* will offer multiple features to prevent many potential external malicious attacks to cascade into the software and its database. To illustrate, developers separated databases from the user UI in order to limit the permissions users can have. Furthermore, a series of internal test cases were applied to functions that requested the foreign API to eliminate potential vulnerabilities.