

Team 5 Project Backlog

Bowling Statistics Tracker

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Problem Statement

The Purdue Bowling Team uses different software to track players and their performance, however they are unsatisfied with the solutions currently available. Our project aims to create an Android app that uses key features of pre-existing bowling apps, and consolidates these features along with additional components into a centralized mobile application. This includes features such as performance tracking, live scoring, player comparisons, player grouping, scheduling, announcements, messaging, and a calendar system.

Background Information

Currently coaches of the Purdue bowling team spend a substantial amount of time after tournaments trying to calculate individual statistics for players based on scorekeeping kept by hand. Other scorekeeping applications exist, such as TeamSnap, however they fail to provide statistics that could be beneficial to coaches in making decisions about which areas players can improve individually, as well as aspects in which the entire team can work on. Current implementations are also more geared to be used by individuals or teams, not both. This means they don't really fit the needs of college coaches as they only specify their data to serve one person or a team, not both. Another shortcoming of the current applications is the difficulty to go back and review previous games to actually calculate the statistics. As a result, most coaches have opted to keep score by hand or through a spreadsheet, which can be tedious and somewhat distracting in the tournament environment. In order to address these shortcomings, we plan to implement the algorithms used by coaches to calculate stats automatically, and present them for each individual player as well as each group (team). We will also include different scoring options that are more suited towards the team aspect of college bowling (baker games/team games).

Requirements (Backlog)

Functional

1. As a player, I would like to be able to create an account from within the application.

2. As a player, I would like to be able to login to the application with a username and password.
3. As a player, I would like to be able to reset my password through the app.
4. As a player, I would like to be able to look up my overall stats from past tournaments.
5. As a player, I would like to be able to see upcoming events that I am scheduled to be in within a calendar interface.
6. As a player, I would like to be notified through a notification about upcoming events I am scheduled for.
7. As a player, I would like to be able to update my scores during a live tournament.
8. As a player, I would like to be able to automatically add my tournament scores to my overall statistics.
9. As a player, I would like to be able to compare my own statistics with another player's.
10. As a player, I would like to be able to request to join/drop a particular event.
11. As a player, I would like to be able to request to join/drop particular player groups.
12. As a player, I would like to be able to see a ranked list of all players for each statistic.
13. As a coach, I would like to be able to message individual players as well as all players at once within a chat-like interface.
14. As a coach, I would like to be able to schedule upcoming practices and tournaments through a calendar interface.
15. As a coach, I would like to be able to add/remove players directly from the application.
16. As a coach, I would like to estimate my team's future performance based on past data.
17. As a coach, I would like to be able to add players to separate groups.

18. As a coach, I would like to see individual groups' aggregated statistics.
19. As a coach, I would like to be able to push reminders as notifications to my players about upcoming events on the calendar.
20. As a coach, I would like to be able to push announcements to my players.
21. As a coach, I would like to be able to edit the statistics of players on my teams.
22. As a coach, I would like to be able to see a ranking of groups based on each statistic.
23. As a coach, I would like to be able to enter scores in the baker format and have individual statistics retained.
24. As a coach, I would like to be able to confirm when live tournaments have begun/ended, automatically storing the statistics from said tournament.
25. As a coach, I would like to be able to allow certain players to edit a group's statistics.
26. As a coach, I would like to be able to merge groups together to get the overall statistics of the new group.
27. As a coach, I would like to be able to restrict if players can freely edit their own statistics without permission.
28. (If time allows) As a player, I would like to receive email reminders of upcoming events.
29. (If time allows) As a player, I would like to see graphs of my performance over time.

Non-Functional

- Every user should have a username and password that grants them access.
- Only coaches should have the ability to create/cancel new events and begin live tournaments.

- Live tournaments will be able to be manipulated by several players concurrently to simultaneously update (only) their own scores.
- The client application must run on Android.
- The interface of the client application must be simple enough for the average user to easily navigate through it.