

# Project Backlog

## Team Information

- Project Name: CollegeAppIO
- Team Number: 12
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## Problem Statement

A common problem that students face when applying to colleges is that there isn't enough data regarding prior application statistics such as application timelines, major specific acceptance rates, and intuitive data visualization. For students applying to universities, our solution will gather data into a single application where students can apply to one or many universities while also gaining a better understanding of their acceptance probability. Similar services, such as The Common Application (Common App) exist already, however, the issues with these existing solutions is that they are all manual offline processes in determining college acceptance decisions. Our solution aims to provide a more data-driven and analytical approach with a higher degree of autonomy in the process of determining college decisions.

## Background Information

- The project stems from the team's personal experiences and that of other students regarding applying to colleges at the undergraduate or graduate level since there is not enough information regarding historic trends on how colleges choose students. Also, the project would help College Admission staff choose from the incoming batch through an online portal. The domain of this product is in the education field.
- Similar platforms to our web platform are the CommonApp and USNews. We thought of these as similar products since the CommonApp allows students to apply to a wide range of colleges while USNews has some basic data regarding college applications.
- The limitation of the CommonApp is that the application portal does not provide any information regarding people who were accepted in previous years and the chances of a student getting into a college. Also, the application portal does not provide the college admission staff a portal for them to be able to accept incoming students conveniently. The limitation of USNews is that it does not provide a lot of data regarding the applicants, specifically major specific information. Knowing this would help incoming students apply for colleges by helping them make an informed decision.

# Requirements (Backlog)

## Functional Requirements

1. As a student user, I would like to create a student account.
2. As a CAS user, I would like to create a College Admission Staff account.
3. As a student user, I would like to use my social accounts to sign up.
4. As a student user, I would like to create a handle for my account.
5. As a student/CAS user, I would like two factor authentication (If time permits).
6. As a developer, I would like to implement two factor authentication (If time permits).
7. As a student/CAS user, I would like to login if I already have an account.
8. As a student user, I would like to upload a profile picture (If time permits).
9. As a student user, I would like to view profile information.
10. As a student user, I would like to create a college application.
11. As a student user, I would like to enter my personal information.
12. As a student user, I would like to enter my academic information.
13. As a student user, I would like to enter my essay.
14. As a student user, I would like to apply to a college.
15. As a CAS user, I would like to create a custom college application (If time permits).
16. As a student user, I would like to answer custom college specific questions (If time permits).
17. As a student user, I would like to submit a college application.
18. As a student user, I would like to confirm my changes to the college application.
19. As a developer, I would like to save the student user's current status of the college application in the event of incompleteness.
20. As a developer, I would like to send a confirmation of a college application submission to a student.
21. As a student user, I would like to see a full list of colleges that I am likely to get into.
22. As a developer, I would like to display the recommended colleges for the user.
23. As a student user, I would like to save a watchlist of colleges that I like.
24. As a student user, I would like to get college specific information.
25. As a student user, I would like to see the historical data for the colleges I am applying for in the form of a table.
26. As a student user, I would like to see the historical data for the colleges I am applying for in the form of a graph.
27. As a student user, I would like to filter the graphed historical data.
28. As a student user, I would like to search colleges I would like to apply for.
29. As a CAS user, I would like to go through the list of applicants.
30. As a CAS user, I would like to accept/reject an applicant.
31. As a CAS user, I would like to view historical data about previous applicants and current data for the application pool.
32. As a CAS user, I would like to enter a vote room to accept/reject applicants (If time permits).
33. As a developer, I would like to send a congratulatory email for accepted applicants.

- 34. As a developer, I would like to send a rejection email for rejected applicants.
- 35. As a developer, I would like to rigorously test the logic and the implementation for the application.
- 36. As a developer, I would like to not allow a student to apply to a college multiple time.
- 37. As a developer, I would like to setup a “forgot password” feature (If time permits).

## Non-Functional Requirements

- 1. Architecture and Performance
  - a. We intend our application to work with Google Chrome and other modern browsers. The frontend will be built with user experience in mind and will use Angular framework to build an interactive and stable UI. The app will also use a scalable implementation by hosting the front-end using Node. The app will also use a REST API to query the database for data and reduce response time. The app shall use a relational database such as MySQL. Common code styling practices will be used across the code base. We would track the performance of the application and log errors to ensure robust backend performance. GitHub will be used as version control.
- 2. Usability
  - a. Our intention for the user interface is for it to be as streamlined and intuitive as possible. Given the many features, it's important that the user interface is well designed so the user can come gather information and analyze and makes decision regarding the college that they would like to apply to.
- 3. Security
  - a. In addition to having an intuitive user interface, if time permits we would like to implement government standardized regulations and security features on our backend to ensure privacy of data for the users of our service. We would like to implement a robust and secure application which complies with international regulatory procedures such as European Union GDPR laws. We would also like to add encryption techniques to our application to prevent data from being hacked from the application server.