# Risks:

## Finance

Since BEAT is an immensely complex product designed with scalability in mind, most of the infrastructure and tools are locked away behind paywalls. As the entire team is composed entirely of first-year students, the chances of the team having access to some of these services are slim. Furthermore, the costs of some of the tools and services required to build the service, such as APIs, cloud servers, and frameworks, are too high for a team of college freshmen to fund. Aside from the software, there is the question of hardware. We do not own massive supercomputers that are present in the conglomerates that run other dating services. As a result, housing the databases and sophisticated algorithms for our service will take a lot of work. The team may have to spend a considerable amount of money to invest into this project. However, the money we make from the monetary systems and the traffic to the service may be much lower than we expected. These risks must be taken seriously as this will affect the financial situation of all parties involved in this project.

## Time

This project will take not only a lot of effort to complete but also a substantial amount of time. Being versed in programming does not happen overnight. Building only 25 percent of the project would require mastery of programming languages such as Python, JavaScript, Swift, etc. To juggle learning the fundamentals of programming alongside APIs and frameworks is nearly impossible. Combined with the fact that the first time most of our team members were exposed to this side of the IT industry was at the start of the semester. Learning the tools to build such a massive project will take years. Furthermore, since we are still starting in university, it is irresponsible to think everyone can spend most of their time on such a project. This fact can significantly delay BEAT's development.

## Difficulty

Many of the systems that we envision for BEAT require an extensive amount of prior knowledge of multiple technology stacks to develop. These tools are complex to understand. Even though we may have plans to study them for use, that does not guarantee that the outcome will be precisely as we expect. In the future, chances are high that team members will find these too far too difficult and time-consuming to invest their time. Moreover, it is not likely that when members learn to utilize these tools, they will use them without running through some program-breaking bugs they cannot fix. The learning curve of learning and operating these tools must be seriously considered, as they are crucial to developing our dating service.

## Popularity

Like any dating service, the effectiveness of its matchmaking heavily depends on the number of active users present in the system. A dating service can not be efficient without a sufficient number of users. That is why the popularity of BEAT is crucial for our service to operate. That said, accomplishing a notable reputation will be the most challenging feat of our project. We will need to create a marketing campaign for our service that effectively reaches as many people as possible. However, the outcome is primarily unpredictable. Some conditions, such as timing and user trends, can be accounted for, though volatile political and social disturbances may ruin our campaign completely.

## Security Breach

It is imperative for a service that deals with the personal information of clients to have the most advanced security systems. Although we may implement security measures to prevent cyber-attacks from taking place, we can not account for every possible method an attacker might use to attack our system. Hackers and cybercriminals will constantly develop innovative solutions to steal our data and access our system illegally. The fallout from an event such as a data breach could be catastrophic as we will not only lose the faith of our user base, but we would also get in trouble with the authorities.

## A.I segregation

Our matchmaking algorithm will include Machine Learning to enhance its capabilities by feeding the A.I with information from databases and our users’ personal information, activities, and interactions. The problem lies with the underlying racism and sexism common in the general consensus. Even though we may not have designed our A.I to segregate one particular sex or racial group from another, there is a high chance it will adapt to the data that is fed to it and, in turn, pick up the unwanted characteristics of users [wired]. This can lead to disastrous results as our matchmaking algorithm would be deemed inefficient, and its ability to give accurate matches would be hindered.

## Latency

In the digital age, people’s attention span is shortening with each coming year. From 12 seconds in 2000 to only 8.76 seconds just 15 years later [wyzowl]. The latency is a significant issue when discussing live services like ours. When users get a match, send a text, or simply move between pages, they expect it to occur immediately. This requires innovative solutions to be put out as communications between servers, the databases, and the app will need to be highly optimized to ensure the latency stays at a minimum. If these solutions are not completed, our service will become sluggish and lose users’ interest, ultimately deterring users from using our service in the future.

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