Project Name: SoundBytes

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Product Backlog

1. Problem Statement:

Currently, many methods of social communication and interaction are available, but none are quite as customizable as they could be. Thus, we will make an android application that allows users to send customizable audio clips to communicate with their facebook friends. This application differs from similar applications by allowing the user to mix and add filters to audio clips. This allows people to not have to look at any specific image, but just listen to a fun and customized short audio clip sent to them.

2. <u>Background Information:</u>

Currently, there are several applications, such as Snapchat and Vine, that allow sharing of video multimedia entertainment. However, no apps exist where the user is able to record audio files, mix them with filters and other sounds, and send them to friends in a simplistic way. Thus, we're targeting individuals in the age range of 15-30, mostly people that like the concise entertainment of Snapchat and Vine, for our new app SoundBytes. There are some apps out there, such as WavePad Audio Editor, that do some of what our app will do, but these apps lack the simplicity in applying filters that we are aiming for, and also lack the Snapchat-ease of sending friends sounds. We plan to tackle this limitation by having a set of easily selectable filters for users to choose from simply by using a checkbox. In addition, recordings will be limited to be no longer than 6 seconds, so there will be no fuss with long recordings. Finally, we will have an interface similar to Snapchat's where you can see incoming Bytes from your friends, with no need to load an external texting tool.

1. Functional Requirements Subsection:

- 1. As a user, I would like to login with Facebook Connect.
- 2. As a user, I would like to capture audio from the phone's microphone.
- 3. As a user, I would like to play the recorded audio back.
- 4. As a user, I would like to apply certain filters to my audio to display my creative prowess.
- 5. As a user, I would like to apply filters to my audio clip such as:
 - Speed-up
 - Slow-down
 - High Pitch
 - Low Pitch
 - Reverse
 - Alien Voice
 - Darth Vader
- 6. As a user, I would like to add a friend by their phone number.

- 7. As a user, I would like to add a friend through my phone book.
- 8. As a user, I would like to find a Facebook friend on the app and prepare to send my audio clip to him/her.
- 9. As a user, I would like to send edited audio to friends.
- 10. As a user, I would like to receive audio from friends who have been added.
- 11. As a user, I would like my audio clips and received audio clips to be no longer than 6 seconds.
- 12. As a user, I would like to use an interactive User Interface to record audio clips, apply filters to the audio, and send them to friends.
- 13. As a user I would like to use a Login Screen.
- 14. As a user I would like to use a Audio record screen where I can record me audio clips..
- 15. As a user I would like to use an Options Screen.
- 16. As a user I would like to use an interactive filter pane where I can select and apply the filters I want to place on my audio clip.
- 17. As a user I would like to use a Received Screen that shows the history of audio clips I've sent and received.
- 18. As a developer, I would like user feedback.
- 19. As a developer, I would like to check the cellular network/wifi and switch to offline mode if none is found.
- 20. As a developer, I want to be able to poll for new incoming messages or audio clips periodically when the user is connected to the internet.
- 21. As a user, I would like to have the ability to change my profile picture, or have it use my profile picture from Facebook.
- 22. As a developer, I would like to be able to redirect users who want to change usernames and passwords to facebook in order for them to do so.
- 23. As a developer, I would like to provide users with the ability to have a personalized friend list which includes other users they have communicated with thus far
- 24. As a user I would like to be able to control the volume at which I record my audio.
- 25. As a developer we would like to have a standardized decibel level when we send audio clips to other users.
- 26. As a developer I would like to cache undelivered audio clips in an online server until the recipient is able to receive the message or audio clip.
- 27. As a user I would like to mix different audio clips and mash them together.
- 28. As a user I would like the option to upload my audio clips to a location where all of my friends can listen to them for a limited time.
- 29. As a user, I would like the option to bypass the login screen once I've already setup my account and logged in once.

2. Non-Functional Requirements subsection:

1. Response Time: For communications with servers such as sending and receiving data, response time is not a priority. However, as a user I would like the user

- interface to be very responsive and the audio processing should be no longer than 2 seconds per filter.
- Scalability: This depends on the number of servers we are using. The more the servers the larger the userbase we can build. So ignoring this limitation this app is very scalable.
- 3. Usability: As a user, I would like a colorful and intuitive user interface which would be similar to snapchat's layout and design.
- 4. Security: As a user, I would like my private information fetched from Facebook to be encrypted and audio clips sent and received to be deleted after they have been sent or viewed.
- 5. Must integrate with Facebook for account creation.
- 6. Must be able to create accounts without Facebook Connect by using phone numbers(if time allows).
- 7. As a developer, I would like to be able to add new filters in the future. This requires reusable code. And provisions are made to allow this.(if time allows).
- 8. Must be designed to operate on an Android phone.