

Gigify

A Spotify and Ticketmaster

Social Media App

An App By

Pranav Bolla, Owen Davitz,

Scott Dobo, Ben Talesnik, and Luke Walker

Gigify came into existence after we as a group realized we all shared a common problem. There is no easy way to know what concerts are happening around us, and then actually finding people who want to go to that concert can be even harder. This led to the concept that is now our app. We were aiming to solve both of these problems, but we mainly focused on solving just the first one. This was the inception of Gigify. Then it even worked with our own testing revealing concerts we were interested in, but without the app would have never known were happening around us. The social media aspect was a stretch goal, and in a future version after this class the app would also function to allow people to post photos or find a group to go to the concert with.

At a high level this is an app that communicates with both the Spotify API and the TicketMaster API. The idea is that we take the user's favorite artist or most recent songs, and use that info to take the nearby concerts produced by Ticketmaster to sift through the results and sort them into concerts that the user is likely to be interested in. We allow the user to make a profile and configure some settings. The main setting that affects the app is the radius that we look for concerts. This can allow users to search from just the nearby city to a state over. We also want to allow users to just see everything happening in the area, so any big concerts that might not be on their recommended list, but are still noteworthy events can be seen too. This is the overall concept that guides Gigify, and that we held during development. The final product was proven to work on us, the developers, so we hope that if the app was fully released others would find the same enjoyment we did out of it during testing.

The first required goal was, "Spotify and Ticketmaster/BandsInTown API interaction." This was exactly as it sounds. The goal does mention BandsInTown but we chose to work with Ticketmaster. We wanted to have the app make HTTP requests to the Spotify and Ticketmaster APIs. This allowed a user to login through their spotify and then from there we would use a

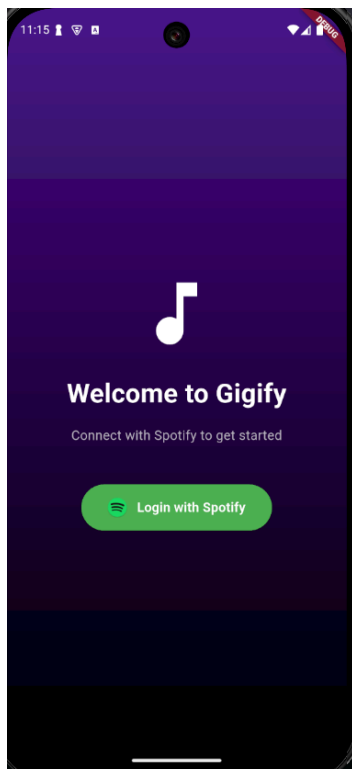
mixture of both the HTTP request to show them curated information pulled from their servers. It combines the liked song and artist that Spotify provides with the local concerts happening provided by Ticketmaster. These come together, and as elaborated upon below will serve the user personalized data.

The second required goal was, “Recommend concerts that match based on bands/genres.” As mentioned above, we pull the user’s recently played and like songs, and from there we take all of the concerts happening nearby, which will be explained further in the next goal. After gathering the nearby events we compare what the user listens to to the concerts and see what matches can be found. This can be as simple as a top artist the user is performing nearby in which case that is an easy match to less obvious matches like a user who listens mainly to rap might get recommendations about nearby rap concerts even if they have never listened to the headlining artist. These are the main two methods to give users recommendations, but we also try to assign a score, so even if the connection is not as obvious as rap to rap, it can still allow the user to discover bands and concerts they might not have known about.

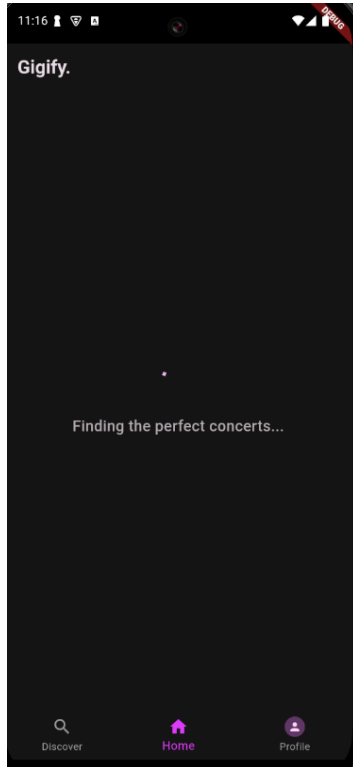
The third required goal was, “Use location data to pull nearby concert recommendations.” This is exactly as it sounds. We use the user’s real location and a max radius set by them in the settings to determine what concerts are shown. The Ticketmaster API lets you limit the search with a given radius, so taking the user defined radius we can use their current location to populate the app with all the concerts in ten miles or fifty miles or however far they want. This allows the user to personalize the app to purely local or to stretch it to hours away.

The stretch goal we went with was, “Concerts recommended to all users.” This allows for the most popular events to be shown to everyone, so really big events for example Coachella or anything similar would evade the user’s personal taste, and be shown to them as these events

encompass such a wide breadth of genres and bands that any given user is likely to find something to like there but they also become wider social events. The app follows the same radius restriction, but for the big events in the search topic all users that can see it will see it. Then a stretch goal not hit, but still worth mentioning for future development potential is “Social media type feed with images from concerts (Images also may be posted under an artists page or venue page so other consumers can see what a past event was like).” This represents the ultimate vision of the app where it becomes a social media platform and allows people to see what concerts they missed were like and post their own photos, and establish a community. Then anyone who is sceptical about a certain concert can see what other people who went though allow them to make more educational choices and potentially go to events they would not have done otherwise. This acts in tandem with the previous stretch goal where users who normally not think about these giant culture events, but after seeing what the previous year’s people thought and the photos shared might go out of their comfort zone, ultimately making the app worth making if a single person goes to an event they would not be without us.

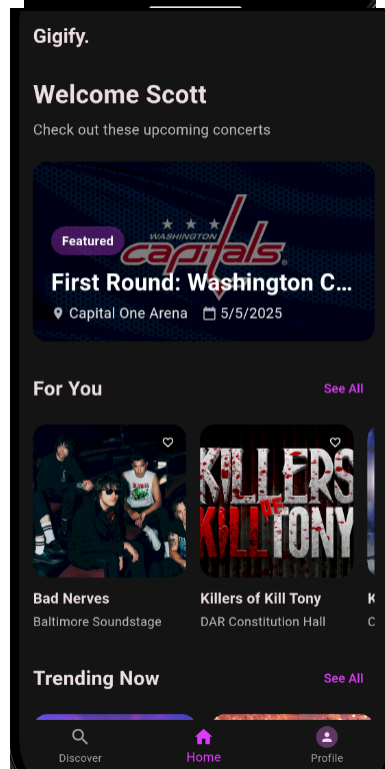


The first thing a user will see when opening the app is the login page, this uses their spotify login, so the spotify api can personalize the info to their music taste. The user will then open another page and be prompted to login. Once they do they will be routed back to the app, and then it will begin by filling with recommendations.



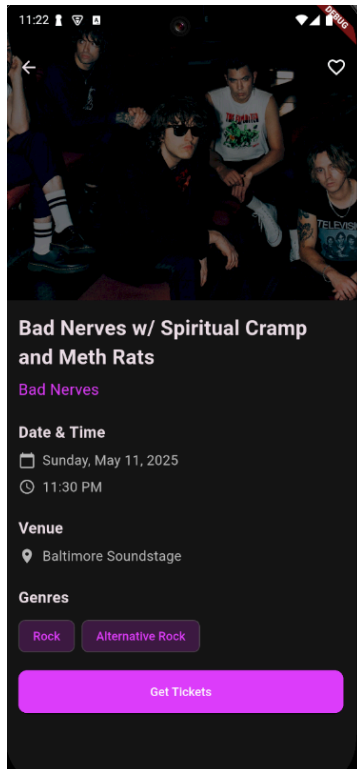
While the API runs in the background we show the user a simple loading wheel.

This is to ensure that the user knows the app is working while we get their recommendation as opposed to it simply being a blank screen, but the main home page will then look like this after it populates.

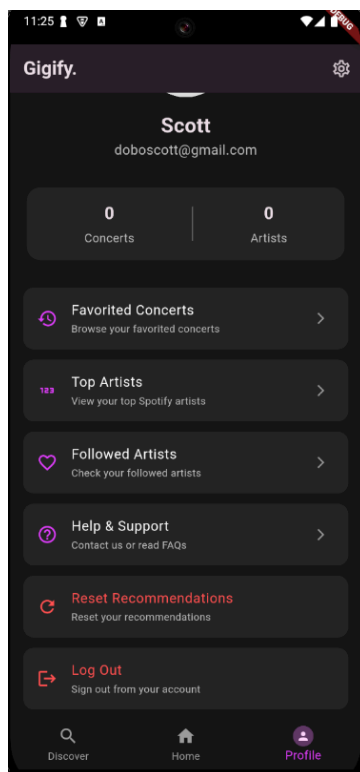


From here the user will see everything happening in the nearby area as well as their personalized concerts.

Then from this page a user can also select each individual topic to learn more about it.



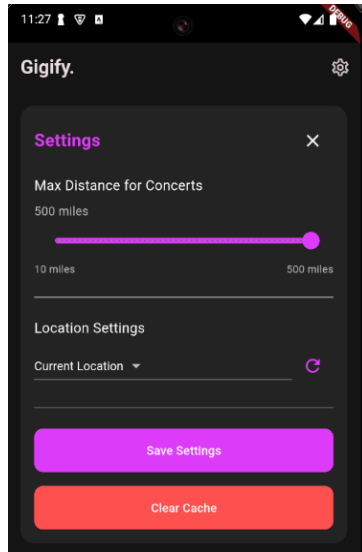
As can be seen here, this allows the user to see time, date, and location. Then there is the artist info as well such as name and genres. Finally, the get tickets button on the bottom links to Ticketmaster allow the user to seamlessly buy the tickets for anything they think they might be interested in.



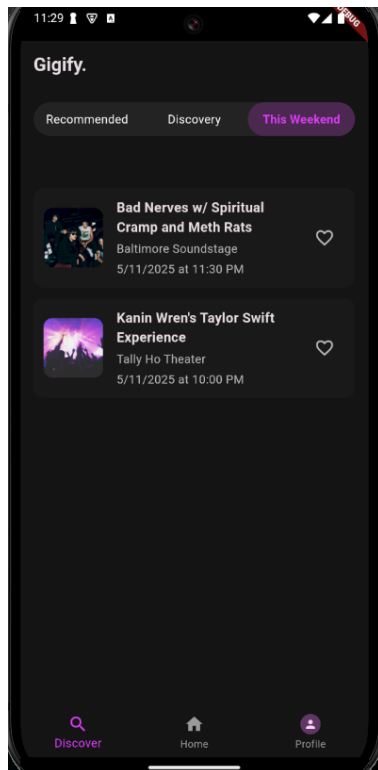
The profile tab features many things that might be useful, such as a place to see what concerns the user favorites and saved for later.

Then the user can also freely see who their top and followed artist are. Finally we included a simple FAQ page to help answer any questions a potential user may have. Lastly a user can then reset their recommendation or log out.

Then there is the gear icon in the corner which opens the settings for the app.



The main setting of the app is that the user can change the radius that is used to get concerts as depending on the user's circumstances they may not be able to travel far, but some are willing to do road trips, so this lets up help both demographics get what they want out of the app.



The last major section of the app is the discovery tab, and it features many more recommendations than the home page in a self-contained list. The same functionality exists of letting the user select and buy tickets from any concerts they like.

Then as seen here there is a specific tab for concerts happening this weekend, which can help users know if anything is coming up as the recommended section shows everything, so it can be overwhelming, and this condensed the data greatly.

In order to properly discuss the full development process, it makes the most sense to start from the inception of the group when we select an idea. We began by thinking about ideas that

could be fun to make, like a game or other entertainment-oriented applications. That led Luke and Ben to remember a project they conceptualized in a prior entrepreneurship class about an app that links a user's music listening data to concerts in their area. This idea was explored in interviews with people in the demographic aimed to target, and people seemed open and excited about this idea. We then decided that we would use this time to create something we genuinely thought was interesting and would enjoy talking about beyond this class. After selecting this idea, the planning went rather smoothly. Having one of the requirements encourages us to think beyond the basic capabilities of the app, and implement them as we saw fit, adding a layer of rich complexity to what otherwise would have been a simpler idea. We shot for the stars with ideas of a social media aspect and message boards, which was a fun thought exercise, but eventually came to the realization of the amount of work and time that would be required to accomplish something of this magnitude.

The first milestone was a simple one to get all the group members on the same page as we began this project. The first step involved setting up our repository and creating a basic framework of the app, with some simple dummy data as a placeholder where the data would later be stored. This went along quite simply, with little goals being set in order of which they would be completed in the milestone, and whichever group member had the most free time would just tick off the next item. As we are all extremely busy with schoolwork and other personal obligations, we all came to an agreement that we would go based off who was free so it would better fit into our schedules. Sometime within the week in which the milestone was due, we would pick a day and time to meet together in person and tie up the loose ends before submission. We would communicate primarily through text and Zoom calls as needed in the interim between in-person meetings and due dates. We did a good job of holding each other

accountable throughout and contributing as evenly as realistically possible given the nature of a group project. After we had created this system, and it was working well for the simplest aspect, we adapted it for the subsequent milestones.

The work ramped up quite quickly with our second milestone as the API integration began. The two main sections of this project included Spotify and Ticketmaster's API. In this section, we familiarize ourselves with the Spotify API and put together the sections of use for our purposes. The main sections included a login screen, pulling useful user information, and setting up where the Ticketmaster API would be placed in the third milestone. The login screen itself was rather straightforward. The Spotify API made this process quite effortless by offering a way to have a user input their username and password, send a confirmation email to their email on file, and confirm it for an access token. However, pulling the user's top artists provided more of a challenge. The primary issue encountered during this section was storing and using the data we pulled from users in a valid and meaningful way. Most of the issues in this step were more debug-related and not necessarily related to gaps in conceptualizing the idea or planning further. It took us a rather considerable amount of time to work through this as a team and figure out the best way to go about this. As mentioned previously, when we were working in our group as a team, people would work on things individually, and then once finished, the piece would be updated and shared with the rest of the group. This was one of the situations where that was not the case. This error was the main reason for one of our in-person group meetings being called. Fortunately, with all of us being present and able to bounce ideas off one another, we were able to get this piece solved and move on to the next element. After the data was made useful, we could implement what we set out to do and properly interface.

The last milestone provided a great feeling of accomplishment once all the pieces were able to talk to one another. The first step for this element was to establish connectivity to the Ticketmaster API. Getting this live was simpler than the Spotify component of this project. This API was used to search for available concerts, based on users' listening data, within a distance range from their selected location. The API's website had example use cases for their calls, such as getting a list of all events in the US and music events in the Los Angeles area. The many different available getters greatly assisted us in this process. The last section for us to do in this was to take those concerts that returned for the location we provided, and eliminate the ones that didn't match the artists and genres. We ran into fewer issues with this section than with the previous one and were able to finish it quickly without needing to call any additional meetings.

We learned a great deal about how to take each group member's strengths and work effectively in a time-efficient manner. Many other group projects presented in prior classes were interesting, but often there are more guidelines and smaller amounts of information and time with which to do it. This was the first time many of us were responsible for virtually every part of the conceptualization and implementation. It was not only an exercise in furthering our skill development in coding, but also the group management aspect, which is invaluable in our field.

There are a few potential directions in which we could go. We do genuinely believe that there is a market for this app if it were to reach its full potential. Based on the interviews conducted related to this idea before we created the actual app for this class, people of many demographics were open to and excited about this idea. Some of the pieces we ran out of time for would likely need to be implemented before we took it to the app stores. Many people highlighted a special interest in a feature of the app that would allow more interaction between friends. One thing we considered briefly before dismissing it as impossible to complete on the

timeframe is a built-out social media section. One of the features we would love to implement in a perfect world is a way to “like” a concert, which would then pop up on friends’ feeds and allow for people to make plans centered around the concerts with people who are also interested in the music. This would reverse engineer the way people interact when creating plans to go to concerts. People often have a small, core group of friends to whom they would offer this concert as an idea to go to, but if those people don't share that same music appreciation, it would fall flat. Many people also have a larger pool of mutual friends, more people who could potentially also appreciate the same thing, and this would be the perfect way to connect people with similar interests. Building off of this idea, there would have to be a way to message friends within the app to provide a place for the planning to happen. With the underlying algorithm already in place, this app would be poised to supply functionality already, but would be improved upon exponentially with the added social aspect.