

Spotter UX Engineer Interview

Develop a UX that allows users to input and modify a YouTube influencer's beat sheet. A beat sheet, originally a concept from screenwriting, is a kind of outline used to plan the content and structure of a piece of media. For YouTube influencers, a beat sheet could be a way to plan out the content of a video or series of videos.

Here's a simple example of what a beat sheet might look like for a YouTube video:

- **Intro (0:00-0:15):** Brief introduction of the host (the influencer) and the topic of the video.
- **Title/Opening Credits (0:15-0:30):** The opening title or credits for the video.
- **Hook (0:30-1:00):** A hook to draw viewers in and get them interested in the rest of the video.
- **Overview (1:00-1:30):** A more detailed overview of what will be covered in the video.
- **Main Content - Part 1 (1:30-5:00):** The first part of the main content. This could be a tutorial, product review, story, etc.
- **Transition (5:00-5:15):** A brief transition between the first and second parts of the main content.
- **Main Content - Part 2 (5:15-9:00):** The second part of the main content.
- **Conclusion (9:00-10:00):** Wrapping up the video, summarizing the key points, and perhaps providing a tease of what's coming in the next video.
- **Call to Action (10:00-10:30):** Asking viewers to like, subscribe, comment, etc.
- **End Credits/Outro (10:30-11:00):** End credits, bloopers, or other outro material.

In the context of this exercise we will assume that a beatsheet is made of acts and each act is made out of beats . Your task is to develop the UX for the beatsheet. An act can be represented as a JSON object as follows:

JavaScript

```
{  
  "name": "string"  
}
```

A beat is represented by the following structure:

```
JavaScript
{
  "name": "string",
  "time": "string",
  "content": "string",
  "cameraAngle": "string",
  "notes": "string"
}
```

Provided APIs

We have provided a service that can handle all the backend operations for the beatsheet. Here's a summary of the available apis:

1. GET /acts

- **Description:** Retrieves a list of acts.
- **Path Parameters:** none
- **Body Parameters:** none

2. POST /acts

- **Description:** Creates a new act
- **Path Parameters:** none
- **Body Parameters:** Act object (JSON)

3. GET /acts/{id}

- **Description:** Retrieves an act by id
- **Path Parameters:**
 - i. id: The ID of the act to retrieve.
- **Body Parameters:** Act object (JSON)

4. DELETE /acts/{id}

- **Description:** Deletes an act and its subsequent beats
- **Path Parameters:**
 - i. id: The ID of the act to delete (long)
- **Body Parameters:** none

5. PUT /acts/beats/{id}

- **Description:** Updates a beat within an act.
- **Path Parameters:**
 - i. id: The ID of the beat to be updated (long).

- **Request Body:** Beat object (JSON)
- 6. DELETE /acts/beats/{beatId}**
 - **Description:** Deletes a beat within an act
 - **Path Parameters:**
 - i. beatId: The ID of the beat to delete (long)
 - **Body Parameters:** none
- 7. GET /acts/{id}/beats**
 - **Description:** Retrieves a list of beats within an act.
 - **Path Parameters:**
 - i. id: The ID of the act to retrieve beats from (long).
 - **Body Parameters:** none
- 8. POST /acts/{id}/beats**
 - **Description:** Adds a new beat to an act.
 - **Path Parameters:**
 - i. id: The ID of the act to add the beat to (long)
 - **Body Parameters:** Beat JSON object
- 9. GET /beats/{id}**
 - **Description:** Retrieves an beat by id
 - **Path Parameters:**
 - i. id: The ID of the beat to retrieve.

Prerequisites

- Docker
- Clone the service from <https://github.com/fmatar/beatsheet-exercise>

Unset

```
git clone git@github.com:fmatar/beatsheet-exercise.git
```

Start the backend

Start the docker containers in the cloned repo:

Unset

```
docker compose create
```

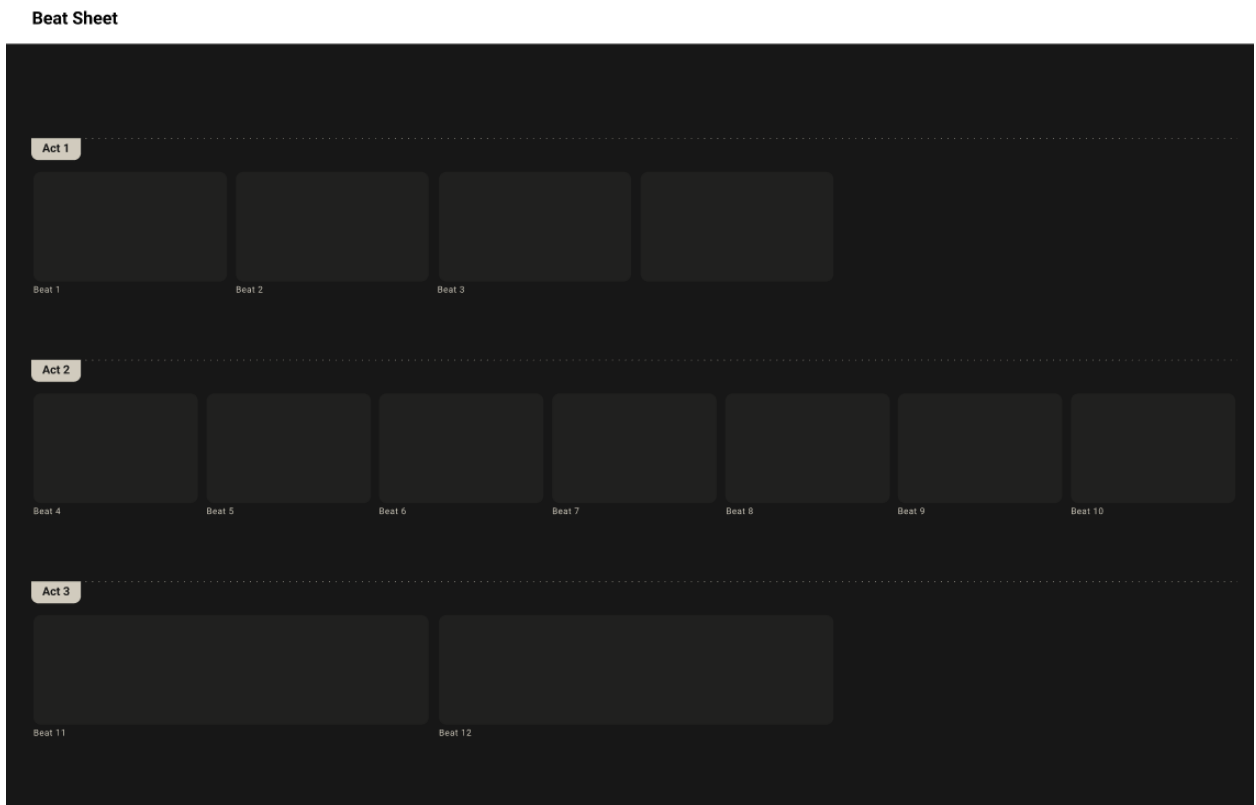
```
docker compose start
```

Access the service and documentation:

1. The service is running at: <http://localhost:8080>
2. The Swagger documentation is available at: <http://localhost:8080/swagger-ui>

Let's get the job done!

3. Create the interface you can use the following mock as a starter, feel free to improvise and update. Do not limit yourself with this design, this is only a mock.



4. Implement the following features in the application:
 - List all acts and all their subsequent beats
 - List the beats in a specific act
 - Create a new act

- Delete an act (Will also delete all the subsequent beats associated with)
 - Create a beat in an act
 - Update a beat in an existing act
 - Remove a beat from the act
- 5. Make sure the UI is responsive for various displays (mobile, tablet, desktop)
- 6. Use proper state management (You may stick to React defaults or use your own such as Redux or others)
- 7. Add your twist to the application, beautify it with animations and cool design techniques as you see fit. (Attention to details is a must!)

Deliverables

- Push your code on github and be ready to share it with the team. You can share the link with the recruiter and they can communicate this information to us
- Include a README on how to run and package the application
- Make sure your code follows coding conventions and best practices
- Bonus: Deploy your solution to Vercel (<http://vercel.io>)