**Semester Project Documentation** (DSA – CS – 221)

**Semester Project Title**: **Streamify**

**Student Details**

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|  | **Student Name** | **Student Reg #** | **Student Degree** |
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**1. Main Features**

1. **Registration / Login Mechanism for Users and Creators**
   * Users can register and log in to their accounts to access features.
   * Creators have access to a separate login mechanism to manage video content.
2. **Video Uploading and Viewing**
   * Creators can upload videos to the platform.
   * Users can browse and watch available videos.
3. **Interaction Features**
   * Users can like and comment on videos.
   * Creators can view the likes and comments on each video.
4. **User Feedback Management**
   * Comments and reactions on videos are visible to the creator for content improvement.

**2. Types of Users & Requirements**

1. **Creator**  
   1.1. Can log in to the application.  
   1.2. Can upload video content to the platform.  
   1.3. Can view all videos uploaded on the platform.  
   1.4. Can see the likes and comments provided by users.
2. **User**  
   2.1. Can register and log in to the application.  
   2.2. Can watch videos uploaded by the creator.  
   2.3. Can like and comment on videos.

**3. Requirements Breakdown**

1. **Registration / Login Mechanism for Users and Creators**  
   1.1. Display a front screen prompting users and creators to either log in or register.  
   1.2. Store new user/creator details in a file or database.  
   1.3. For login, match entered credentials with stored data.  
   1.4. Ensure password recovery or reset functionality for users.
2. **Video Uploading and Viewing**  
   2.1. Creators should have a dedicated interface for uploading videos.  
   2.2. Users can access a video gallery interface.  
   2.3. Videos should support multiple formats (e.g., MP4, AVI).  
   2.4. Ensure the uploaded videos are securely stored and displayed.
3. **Interaction Features**  
   3.1. Allow users to like videos with a simple click.  
   3.2. Provide a comment section below each video.  
   3.3. Store likes and comments in a structured format for analytics.
4. **User Feedback Management**  
   4.1. Display comments and the total likes on each video to the creator.  
   4.2. Allow creators to moderate comments for inappropriate content.

**4. Features to Codding Matrix**

*(In the following table you will mention the following items for each feature, mention the items in each column for each feature of your application)*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr**  **#** | **Feature Name** | **DSA Concept Used** | **Operation Performed** | **Complexity**  **Analysis (Approximate)** | **No. of Variables & Objects Created** | **Functions Created** | **Line of Code Written** |
| 1 | xyz | Linked Lists, Trees, Queues | Traversal + Sorting | O (n) | 4 | 2 | 110 |
| 2 | abc | Stacks with Array | Insertion + Traversal | O (n log n) | 25 | 3 | 55 |
|  |  |  |  |  |  |  |  |
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1. **Project Screenshots**

*(Take feature wise screenshots of main running screens of your project and paste here)*