Assignment # 2

CS322 - SC - Software Construction

**─**News Vine (Case Study # 4)

**Group no. 08**

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**Submitted to:** Dr. Onaiza Maqbool

Use Case Diagram:



**Hania Naeem’s Part:**

**Use Case UC1:** Comments on the news post

**Primary Actors:** User

**Stakeholders and Interests:**

* User: A user is interested in engaging with news content by commenting on different news posts.
* Platform Administrators: The administrators are mainly interested in the providence of an encouraging atmosphere for people commenting on the posts.

**Preconditions:**

* The registered user must be logged into the platform.
* The news posts should actually be present online/virtually.

**Post conditions:**

* Notification is sent to the news poster or author about the recently added comment
* The comment is added to the news post accordingly.

**Basic Flow:**

1. The user chooses the news post they wish to comment on.

2. He/she further accesses the comment section by clicking onto it.

3. The user enters his/her remark into the chosen news post area.

4. The platform processes and displays the comment written by the user within the post.

**Alternative Flow:**

* The user decides not to submit the comment and closes the comment section.
* The user submits the comment and later decides to remove or modify it.

**Special Requirements:**

* Automated profanity filtering to block comments with offensive language.
* Enforced guidelines prohibiting hate speech, harassment, and misinformation.

**Technology and Data Variation List:**

* Database backend for comment storage.
* A user-friendly frontend interface for comment interaction.
* Incorporation with restraint tools for content oversight.
* Caching mechanisms for improved performance.

**Frequency of Occurrence:**

The rate of commenting may vary based on the popularity and timeliness of news posts.

**Open Issues:**

* How to handle the spam comments?
* Monitoring industry trends for adaptive moderation strategies.

**Ghulam Anwar’s Part:**

**Use Case UC2:** Authentication and Authorization

**Primary Actor:** User and platform administrators

**Stakeholders and Interests:**

* Users: Interested in securely accessing their account and protecting their personal information.
* Platform Administrators: Interested in maintaining the security and integrity of the platform.

**Preconditions:**

* User must have registered an account.
* User must provide valid credentials.

**Post conditions:**

User is granted access to their account.

**Basic Flow:**

1. User navigates to the login page.

2. User enters their username/email and password.

3. System validates the credentials.

4. If credentials are valid, user is logged in.

**Alternative Flow:**

* User forgets their password and initiates a password reset process.
* User attempts to login with incorrect credentials and is prompted to try again.

**Special Requirements:**

Implementation of secure authentication mechanisms (e.g., hashing passwords).

**Technology and Data Variation List:**

* Database for storing user credentials.
* Encryption technology for securing user data during transmission.

**Frequency of Occurrence:**

Occurs whenever a user wants to access their account.

**Open Issues:**

1. Implementation of multi-factor authentication.
2. Handling of forgotten passwords.

**Awais Ali’s Part:**

**Use Case UC3:** User Ratings

**Primary Actor:** User

**Stakeholders and Interests:**

* User: Interested in rating news posts to influence their visibility and credibility.
* Platform Administrators: Interested in preventing abuse of the rating system.

**Preconditions:**

* User must be logged in.
* News post must exist.

**Post conditions:**

User's rating is added to the post.

**Basic Flow:**

1. User reads a news post.

2. User clicks on the rating system.

3. User's rating is recorded.

**Alternative Flow:**

User retracts their rating and submits a different one.

**Special Requirements:**

Prevention of spam ratings.

**Technology and Data Variation List:**

* Database for storing user ratings.
* Algorithm for calculating post ratings.

**Frequency of Occurrence:**

Expected to occur frequently as users engage with posts.

**Open Issues:**

* 1. How to prevent manipulation of ratings.
  2. Should there be a reputation system for users based on their ratings?