Analysis document

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Event storming

At the start of the project an event storming session took place that was based on the project case. The goal was to create a business model that can be used during product development. The result is shown in figure [1].

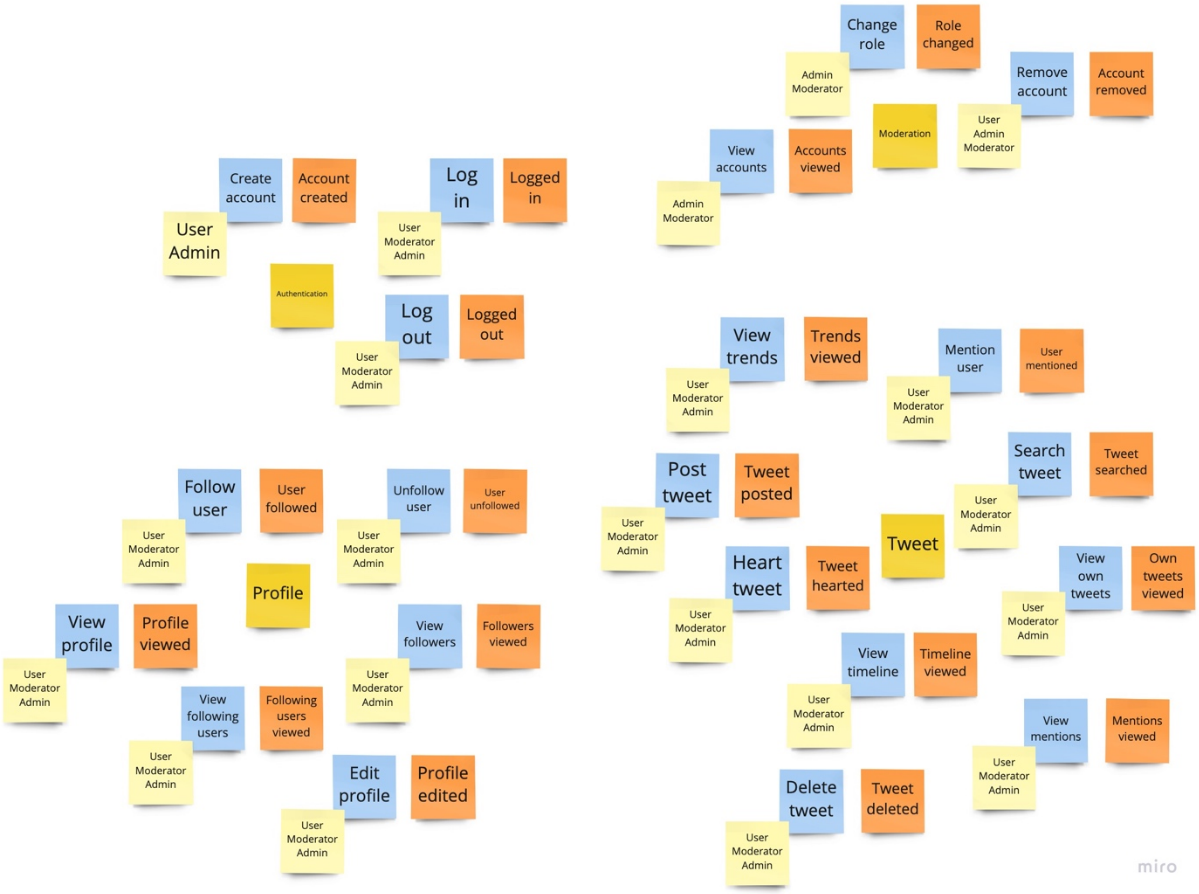

Figure 1 Event storming

Requirements

Functional requirements

Roles of the application: user, moderator and admin.

Must have

FR-01 The user, moderator and admin must be able to post a tweet
FR-02 The user, moderator and admin must be able to delete a tweet
FR-03 The user, moderator and admin must be able to view his/her timeline
FR-04 The user, moderator and admin must be able to view his/her profile
FR-05 The user, moderator and admin must be able to log in
FR-06 The user, moderator and admin must be able to log out
FR-07 The admin and moderator must be able to view all accounts
FR-08 The admin and moderator must be able to change the role of a user
FR-09 The admin and moderator user must be able to remove an account
FR-10 The user, moderator and admin must be able to edit his/her profile

Should have

FR-11 The user, moderator and admin should be able to view his/her tweets
FR-12 The user, moderator and admin should be able to view his/her followers
FR-13 The user, moderator and admin should be able to view his/her following users
FR-14 The user, moderator and admin should be able to heart a tweet
FR-15 The user, moderator and admin should be able to search a tweet
FR-16 The user, moderator and admin should be able to follow a user
FR-17 The user, moderator and admin should be able to search a user
FR-18 The user, moderator and admin should be able to unfollow a user
FR-19 The user and admin should be able to create an account
FR-20 The user, moderator and admin should be able to mention a user in a tweet
FR-21 The user, moderator and admin should be able to view mentions
FR-22 The user, moderator and admin should be able to view trends

Non-functional requirements

Performance: to use the platform it must have good performance for the users to stay on the platform and have a good experience.

To validate this, performance testing, load testing and stress testing should be used.

Scalability: Because the social media platform could be used by an increasing number of users in the future the scalability of the system must be good.

To validate this, scalability testing should be used.

Usability: with a social media platform it is important for the user to have an enjoyable experience, that is why the usability of the platform should be good.

To validate this, usability testing should be used.

Maintainability: when creating a big social media platform, maintainability is important since a lot of people will be working on the code and should be easy to maintain.

To validate this, code reviews, unit and integration tests should be used, and the code should be well documented.

Security: Since a lot of people will use the platform and personal information will be stored, the security of the platform must be solid.

To validate this, the security by design documentation should be followed.

Privacy: As mentioned, the platform will have personal information of its users, so privacy will be important and must be implemented correctly.

To validate this, the AVG guidelines for personal data should be followed.

Reliability: since a lot of people can make use of the social media platform at once and there are important use cases like moderating the platform should be reliable to use.

To validate this, load testing, regression testing, unit testing and integration tests should be used.

Use Case Diagrams

The figure [2] below shows the use case diagram of the account functionality.

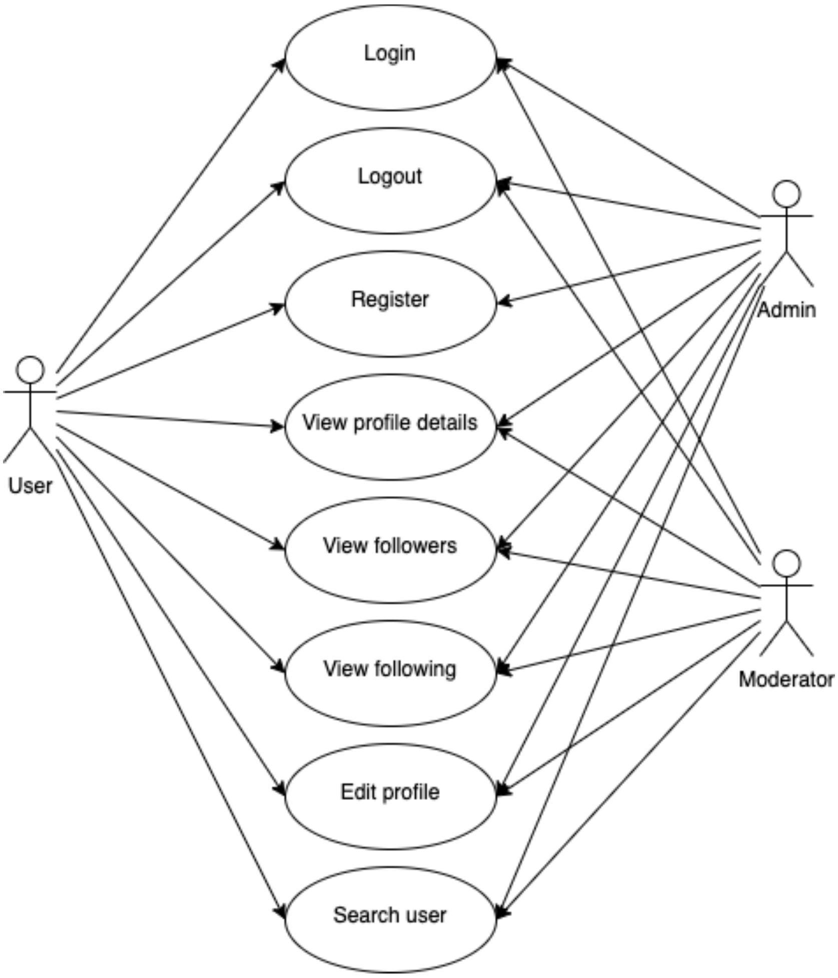

Figure 2 Accounts use case diagram

The figure [3] below shows the use case diagram of the tweet functionality.

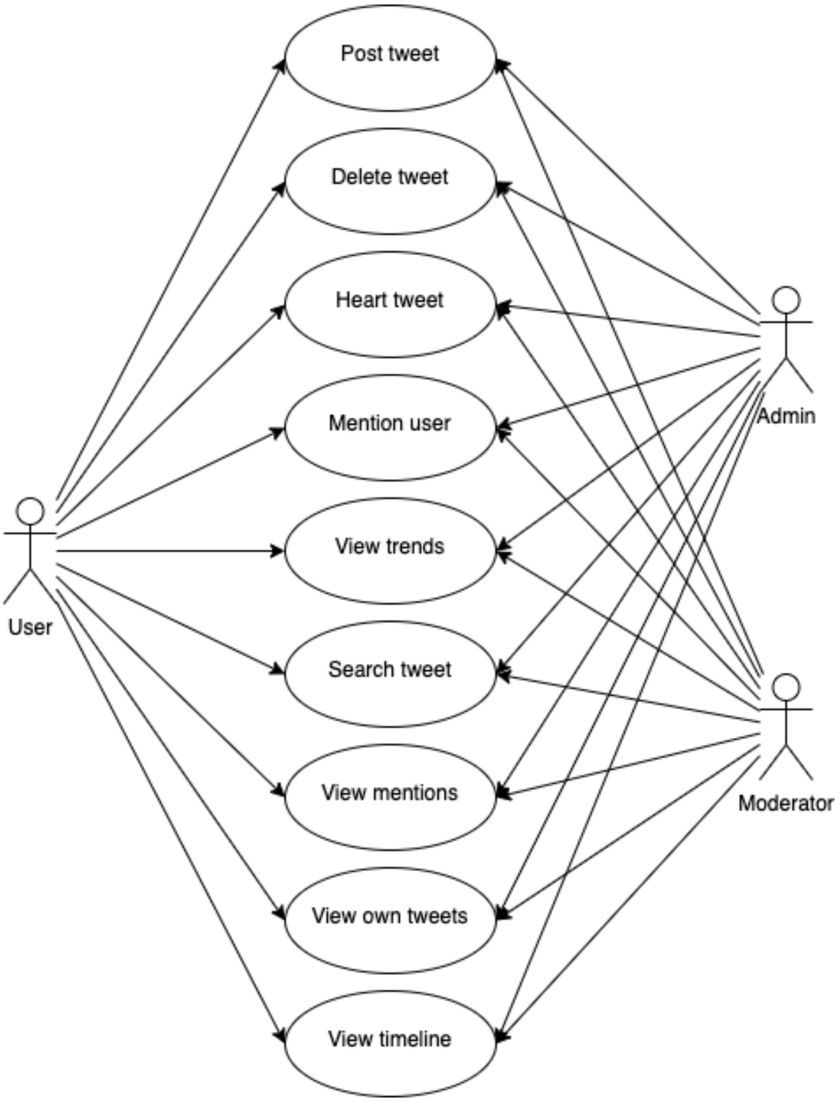

Figure 3 Tweets use case diagram

The figure [4] below shows the use case diagram of the moderation functionality.

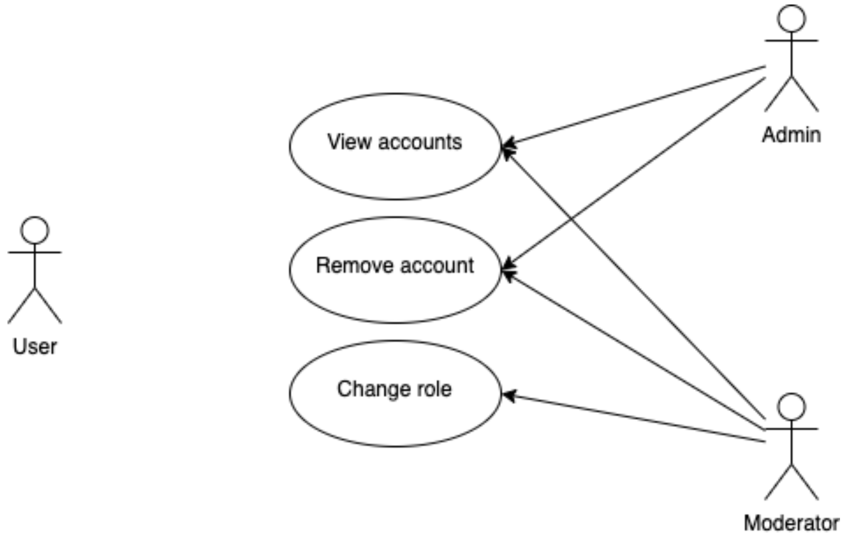

Figure 4 Moderation use case diagram

Use Cases

Name	UC01: Login
Summary	The actor wants to login to Kwetter with an existing account
Actors	User, moderator and admin
Assumptions	The actor has an account
Description	1. The actor fills in the account information 2. The system checks the given information
Exceptions	1. The given information is incorrect 2. The account has been deleted
Result	The actor is logged in and can make use of the functionality of Kwetter

Name	UC02: Logout
Summary	The actor wants to logout
Actors	User, moderator and admin
Assumptions	The actor is logged in
Description	1. The actor chooses the option to logout 2. The system logs out the account
Exceptions	-
Result	The actor is logged out

Name	UC03: Register
Summary	The actor wants to create a new account
Actors	User, moderator and admin
Assumptions	-
Description	1. The actor fills in the account information 2. The system checks the given information
Exceptions	1. The given information is incomplete 2. The given already exists in another account
Result	The actor has created a new account

Name	UC04: Tweet
Summary	The actor wants to post a tweet
Actors	User, moderator and admin
Assumptions	1. The actor is logged in
Description	1. The actor chooses the option to create a tweet 2. The actor types the tweet 3. The actor chooses to post the tweet
Exceptions	1. The tweet is too long
Result	The actor has posted a tweet

Name	UC05: Search tweet
Summary	The actor wants to search for a tweet
Actors	User, moderator and admin
Assumptions	1. The actor is logged in
Description	1. The actor chooses the option to search for a tweet 2. The actor types into the search bar

	3. The system searches all the tweets 4. The system shows a list of tweets matching the search criteria
Exceptions	1. No tweets can be found matching the search criteria
Result	The actor has searched a tweet

Name	UC06: Heart tweet
Summary	The actor wants to heart a tweet
Actors	User, moderator and admin
Assumptions	1. The actor is logged in
Description	1. The actor chooses the option to heart a tweet 2. The system saved the heart
Exceptions	1. The tweet has already been liked by the actor
Result	The actor has hearted a tweet

Name	UC07: Follow user
Summary	The actor wants to follow a user
Actors	User, moderator and admin
Assumptions	1. The actor is logged in
Description	1. The actor selects the user he/she wants to follow 2. The system saved the followed user
Exceptions	1. The user is already being followed by the actor
Result	The actor has followed a user

Name	UC08: Delete tweet
Summary	The actor wants to delete a tweet
Actors	User, moderator and admin
Assumptions	1. The actor is logged in
Description	1. The actor selects the tweet he/she wants to delete 2. The actor choses to delete the tweet 3. The system deleted the tweet
Exceptions	-
Result	The actor has deleted a tweet

Name	UC09: Mention user
Summary	The actor wants to mention a user in a tweet
Actors	User, moderator and admin
Assumptions	1. The actor is logged in 2. The actor is creating a tweet
Description	1. The actor types @ + the name of the user he/she wants to mention 2. The actor choses to post the tweet 3. The system mentions the user
Exceptions	-
Result	The actor has mentioned a user in a tweet

Name	UC10: Change user role

Summary	The actor wants to change the role of a user
Actors	Moderator and admin
Assumptions	1. The actor is logged in
Description	1. The actor selects a user 2. The actor choses the new role of the user 3. The actor choses to save the new role 4. The system saves the new role of the user
Exceptions	1. The user already has the selected role
Result	The actor has changed the role of a user

Name	UC11: Edit profile information
Summary	The actor wants to change the information of his/her profile
Actors	User, moderator and admin
Assumptions	1. The actor is logged in
Description	1. The actor chooses to edit his/her profile information 2. The actor edits the profile information 3. The actor choses to save the new profile information 4. The system saves the new profile information
Exceptions	1. The information has not changed
Result	The actor has edited the information of his/her profile

Domain model

The figure [5] below shows the domain model.

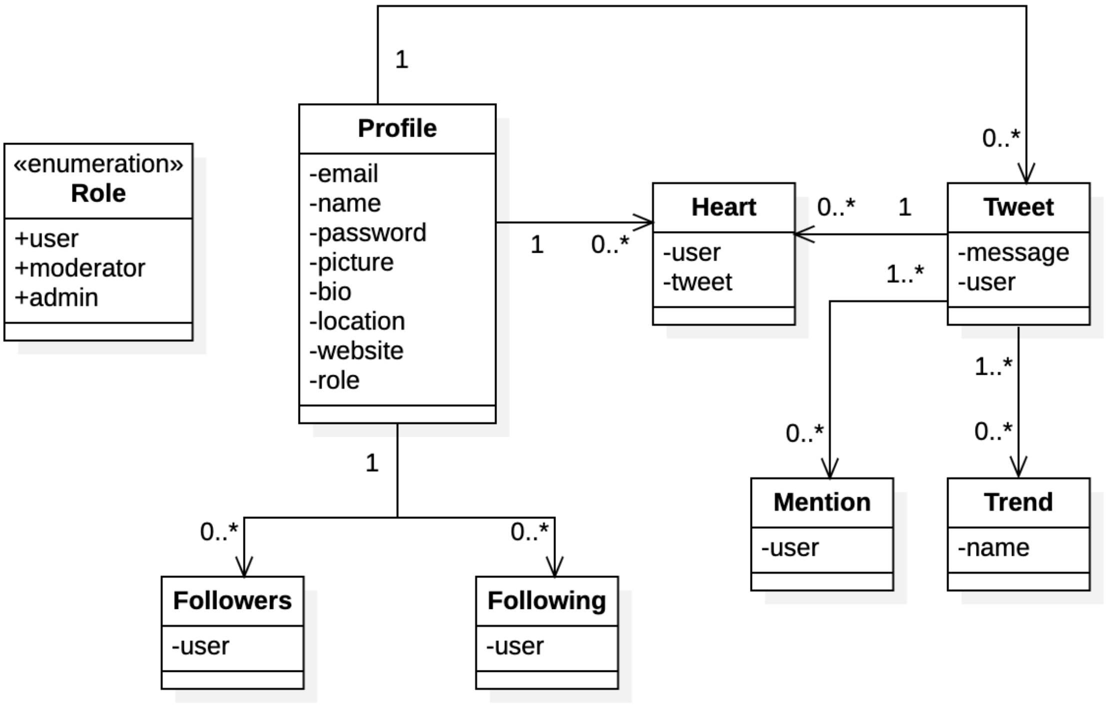

Figure 5 Domain model