



CONCORDIA UNIVERSITY

COEN 6312

MODEL DRIVEN SOFTWARE ENGINEERING

DELIVERABLE 2: DOMAIN ANALYSIS AND REQUIREMENTS

Team : EmBridge

40053363 - Ishaan Sharma

40035779 - Kishor Tare

40043592 - Nidhi Patel

40048878 - Rashmi Narayan

40071278 - Yassine Jebbar

Guided By:

Dr. Wahab Hamou-Lhadj

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Introduction

This document depicts **Use case Diagram**, **Domain Description** of the domain and a list of **functional requirements** of the system named *Embridge* in detail.

Team Workflow

During this deliverable, the team often made regular meetings to discuss the tasks and align the doubts. The objective of each meeting is described in Table 1. :

Table 1: Team meetings and milestones.

Date	Discussion
Jan 25	Review on Deliverable Description and Requirements; Upcoming Meetings Schedules.
Jan 27	Detailed discussion on Deliverable 2; Domain Description
Feb 1	Use case Model overview
Feb 3	Prepared Functional requirement
Feb 8	Final discussion and modifications on deliverable 2
Feb 15	Submission of Deliverable 2

1 Domain Description

Requirements: Domain description will allow user to interact with system should be explained briefly. It should also consist of detail description of each activity a user will perform once he/she will interact with system.

Embridge is a common platform for employees within a company to discuss their progress or to make announcements. An employee can be either a regular employee or a manager, although they have the same permissions on the platform. In order to use the platform, the employee needs to register first. Every employee can log in to the platform once he is registered. After logging in, an employee can create a post (text, image, video), comment to a post or simply react to a post (like/dislike/comment). Moreover, an employee can send a private message to another employee, as well as create a group of employees conversation where the members of the group can talk to each other. In order to be included in the group conversation, an employee needs to be added to the group by a member of the group. An employee can also send a group request to be added to a group. Finally, an employee can also look for other employees within the platform.

2 Use Case Diagram

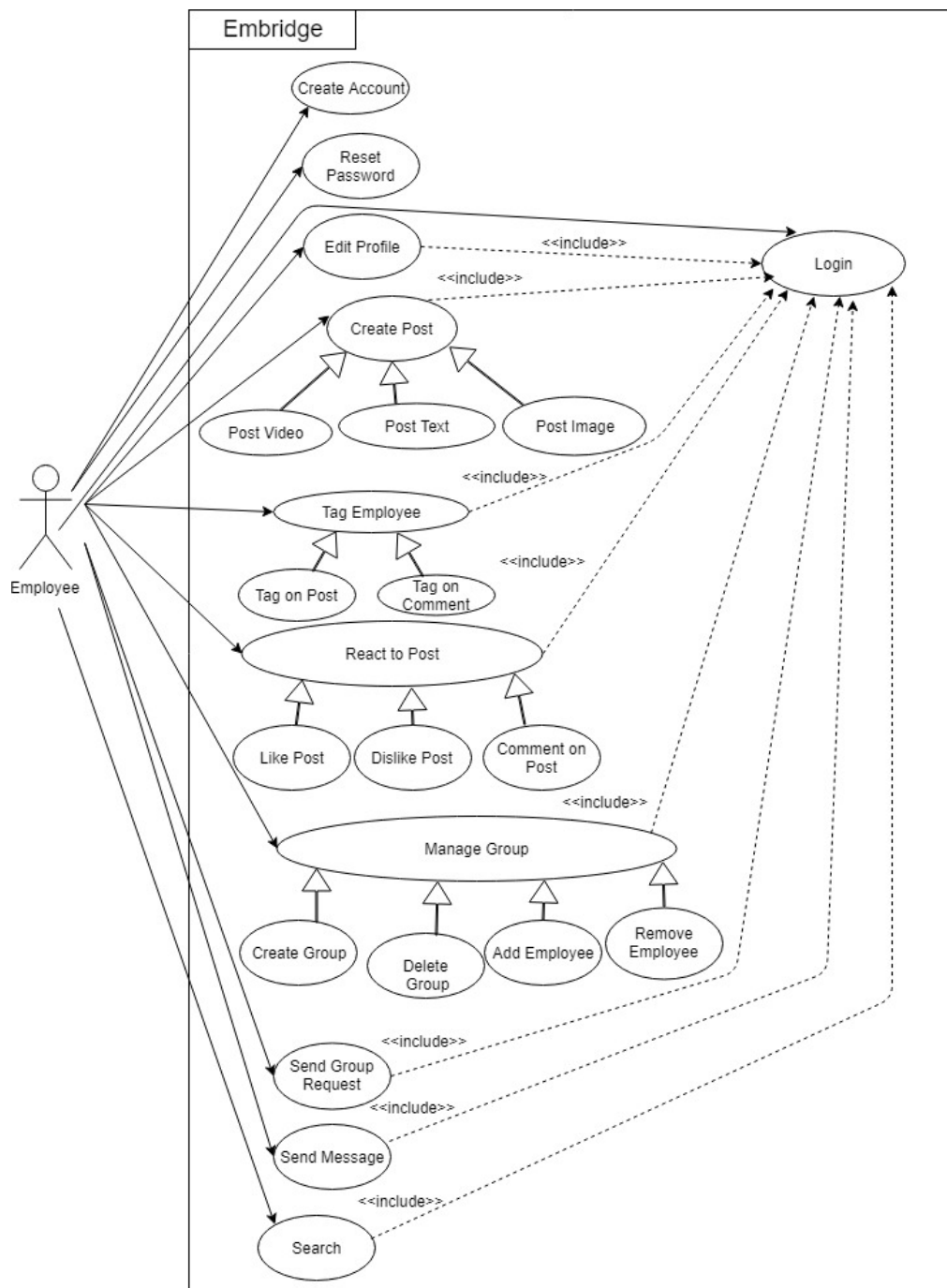


Figure 1: Use Case Diagram

[2][1]

Table 2: UC1: Create Account

Number	UC1
Name	Create Account
Actors	Employee
Description	An employee creates a user account on the Embridge platform
Preconditions	<ul style="list-style-type: none"> • username does not already exist, • no username is associated with the email
Trigger	Employee wants to use functionality of EmBridge
Main Scenario	<ol style="list-style-type: none"> 1. use case begins when an employee clicks on the register button 2. A form containing full name, username, email, date of birth, security question, security answer shows up for the employee. 3. The employee fills the form with the required information and clicks on the OK button. 4. Login page shows up for the employee.
Postconditions	A user account for the employee must be created on the database

Table 3: UC2: Login

Number	UC2
Name	Login
Actors	Employee
Description	Access to the platform and the content available within posted by other employees
Preconditions	Employee must be already registered in Embridge
Trigger	Employee wants to use Embridge platform.
Main Scenario	<ol style="list-style-type: none"> 1. Employee enters username and password 2. Employee clicks on the login button 3. The home page containing the latest posted content on the platform shows up
Postconditions	The account must keep logged in indefinitely (as long as the employee doesn't log out)

Table 4: UC3: Reset Password

Number	UC3
Name	Reset Password
Actors	Employee
Description	An employee can reset his account's password in case the password is forgotten
Preconditions	The employee must be registered in Embridge
Trigger	Employee forgets or enters wrong password.
Main Scenario	<ol style="list-style-type: none"> 1. In the login page, the employee clicks on forgot password button 2. The platform asks for the employee's username 3. The employee fills the field with his/her username and clicks ok. 4. A page shows up containing the security question 5. The employee answers the security question 6. A page shows up asking the employee to enter a new password. 7. The employee enters the new password and confirms it and clicks the OK button 8. The login page shows up
Postconditions	The employee's password must be updated in the database)

Table 5: UC4: Edit Profile

Number	UC4
Name	Edit Profile
Actors	Employee
Description	An employee can make modifications on his account information
Preconditions	The employee must be logged in
Trigger	Employee wish to change his profile information.
Main Scenario	<ol style="list-style-type: none"> 1. clicks on Account tab 2. A page showing the current employee's information shows up 3. the employee changes whatever information he wants to change and clicks on the OK button 4. The home page feed for the employee's account shows up
Postconditions	Changed information must be updated in the database

Table 6: UC5: Create Post

Number	UC5
Name	Create Post
Actors	Employee
Description	An employee can post content on the platform. This includes posting text, image, video or any combination of those three.
Preconditions	The employee must be logged in
Trigger	Employee wants to share information/media with others.
Main Scenario	<ol style="list-style-type: none"> 1. The employee writes something on the post field 2. If the employee wishes to join a video or image with the text, he clicks on the image/video icon below 3. The image or video get uploaded in the post 4. The employee clicks on the post button 5. The post shows immediately on the employee's timeline
Postconditions	The employee's number of posts must be incremented in the database.

Table 7: UC6: React to Post

Number	UC6
Name	React to Post
Actors	Employee
Description	Employee can react (like/dislike/comment) to his colleagues' post.
Preconditions	The employee must be logged in.
Trigger	Employee wants to react to his/her colleagues post
Main Scenario	<ol style="list-style-type: none"> 1. User views employees post from his feed stories. 2. User can like/dislike and/or type his comment in comment field. 3. User clicks on the like/dislike/add button. 4. Post get updated on number of likes/dislikes/comments.
Postconditions	<ul style="list-style-type: none"> • Comment is added to the post. • Like/Dislike count increases in the database.

Table 8: UC7: Tag an Employee

Number	UC7
Name	Tag an Employee
Actors	Employee
Description	An employee can tag/mention another employee in a post or comment.
Preconditions	Employee must be logged in to the Embridge platform.
Trigger	Employee wants to mention his colleague in his/her post or comment.
Main Scenario	<ol style="list-style-type: none"> 1. User creates post in the post field/comments on the comment section of another post. 2. User uses the '@' character to tag another employee by name. 3. User posts the content/comment.
Postconditions	The tagged employee is notified on the post/comment where he is mentioned.

Table 9: UC8: Manage group

Number	UC8
Name	Manage group
Actors	Employee
Description	An employee can create/delete group as well as add/remove people from a specific group.
Preconditions	<ul style="list-style-type: none"> • Employee must be logged in to the Embridge platform. • An employee must be group admin to delete group • An employee must be group admin to remove people from group
Trigger	Employee wish to create a group.
Main Scenario	<ol style="list-style-type: none"> 1. User clicks on groups tab in the menu bar. 2. User clicks on the "New group" button. 3. User fills in the information in group name and description field. 4. User can add other employees using search field. 5. User clicks on create group button.
Postconditions	Group is created with group creator as an admin.

Table 10: UC9: Send Group Request

Number	UC9
Name	Send Group Request
Actors	Employee
Description	Employee can send a request to join a group.
Preconditions	Employee is not a member of that group.
Trigger	Employee wants be a member of an existing group.
Main Scenario	<ol style="list-style-type: none"> 1. User clicks on groups in the menu bar. 2. User enters group name in Find group field and hit search button. 3. User selects the group he wants to be member of. 4. User clicks on send group request button.
Postconditions	Group request is sent to the group admin.

Table 11: UC10: Send Message

Number	UC10
Name	Send Message
Actors	Employee
Description	Employees can send private messages to each other.
Preconditions	Both employees are logged in.
Trigger	Employee wants to send a private message to his colleague.
Main Scenario	<ol style="list-style-type: none"> 1. User clicks on message button. 2. User clicks on new message button. 3. User selects an employee to send message to. 4. User types message content. 5. User clicks on send button.
Postconditions	Message is delivered to the specified employee.

Table 12: UC11: Search

Number	UC11
Name	Search
Actors	Employee
Description	An employee can search for other employees profile.
Preconditions	Employee is logged in to the Embridge platform.
Trigger	Employee wants to search specific name(keyword).
Main Scenario	<ol style="list-style-type: none">1. User types in the name (keyword) in the search box.2. User clicks on the search button.3. User gets the results related to the search name (keyword).
Postconditions	Employee can view other employees profile

3 Functional Requirements

The functional requirements that Embridge should satisfy are as follows:

FC1: The creation of an account for new users.

FC2: The registered users should be able to reset their passwords.

FC3: A registered user should have the possibility to edit his personal information within the platform.

FC4: Any registered user should have the ability to post content on the platform. Content includes image, video or text or any combination of those three.

FC5: A registered user should be able to mention/tag another user on a post or a comment (or both).

FC6: A registered user should also have the possibility to react to a post in the platform. Reaction includes like/dislike a post or comment on a post.

FC7: The platform should allow its registered users to manage groups. Group management can be the creation/deletion of a group as well as addition/removal of other users to/from a specific group.

FC8: A registered user should also have the possibility to send a request to join a specific (existing) group.

FC9: Any pair of users should have the ability to exchange private messages.

FC10: A registered user should have the possibility to search for another user in the platform.

References

- [1] UML Use Case Diagram Tutorial. <https://online.visual-paradigm.com/tutorials/use-case-diagram-tutorial/>. [Online].
- [2] Ingo Lütkebohle and F Midvetkin. UML Use Case Diagram Tutorial. <https://www.youtube.com/watch?v=zid-MVo7M-E/>, 2018. [Online; accessed 07-Feb-2018].
- [3][Ebook]. Retrieved from <http://csis.pace.edu/~marchese/CS389/L9/Use%20Case%20Diagrams.pdf>
- [4][Ebook]. Retrieved from http://www.bredemeyer.com/pdf_files/functreq.pdf