Software Engineering
Part 1

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  Delete Story 15
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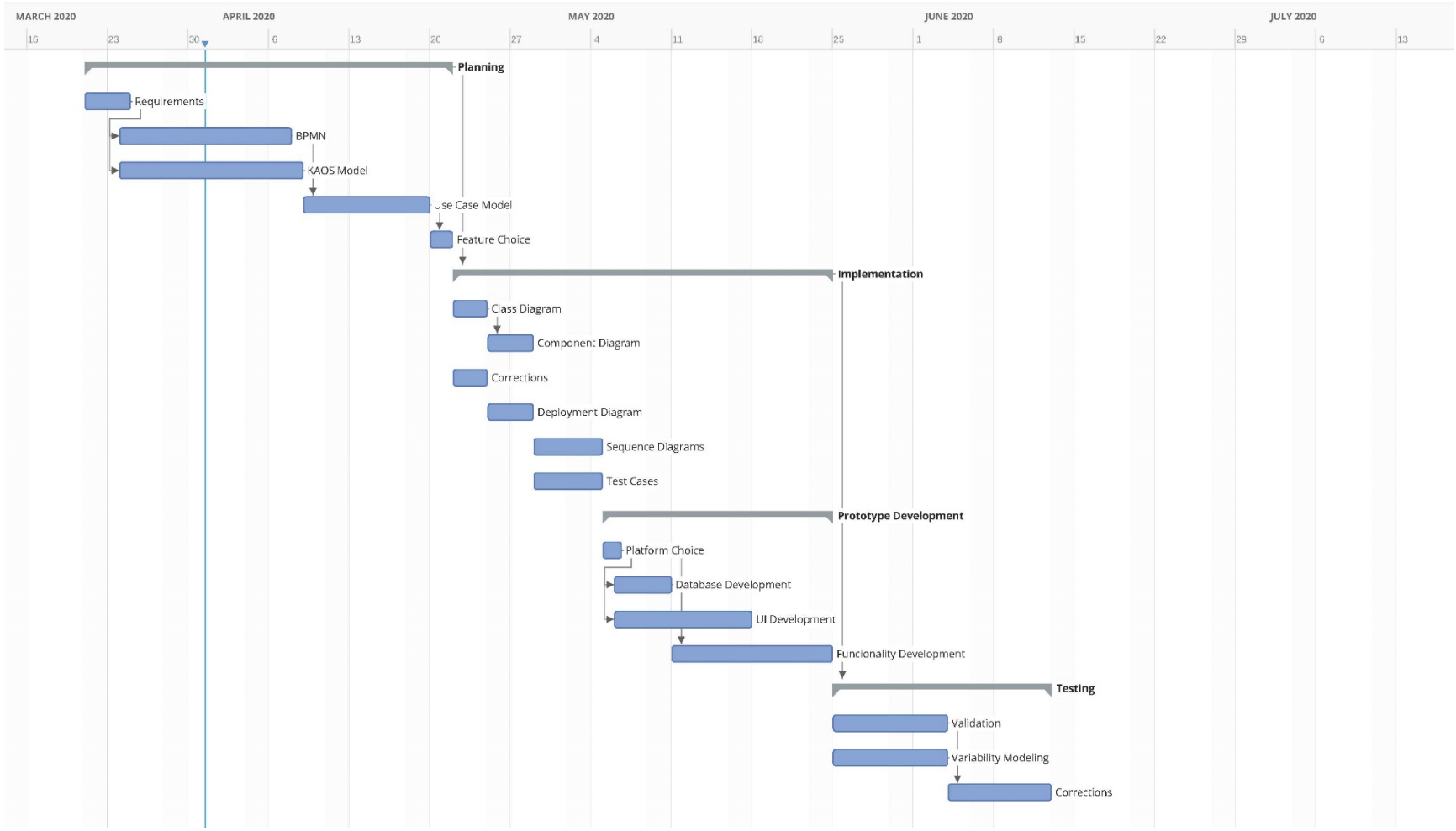
Introduction

This present report contains part of the modelling of a solution, called Instagram Plus, akin to Facebook's Instagram Social Network.
It contains the Gantt Model chart of the project development, the list of the requirements and the KAOS and BPMN models of all its functionalities.
Finally, it contains a proposal of the features to be developed in the next phase of the project and a use case model of the application.

Gantt Chart


MARCH 2020
APRIL 2020
MAY 2020
JUNE 2020
JULY 2020
16
23
30
6
13
20
27
4
11
18
25
1
8
15
22
29
6
13
Planning
Requirements
BPMN
KAOS Model
Use Case Model
Feature Choice
Implementation
Class Diagram
Component Diagram
Corrections
Deployment Diagram
Sequence Diagrams
Test Cases
Prototype Development
Platform Choice
Database Development
UI Development
Funcionality Development
Testing
Validation
Variability Modeling
Corrections

Requirements List

Functional Requirements

- Register User
- Login
- Edit Profile
- Follow User
- Block User
- Watch Story
- Make Story
- Delete Story
- Make Post
- React to Post
- Save Post
- Delete Post
- Watch Feed
- Search
- Create Collection of Stories
- Send Message
- Manage Privacy
- Delete Comment

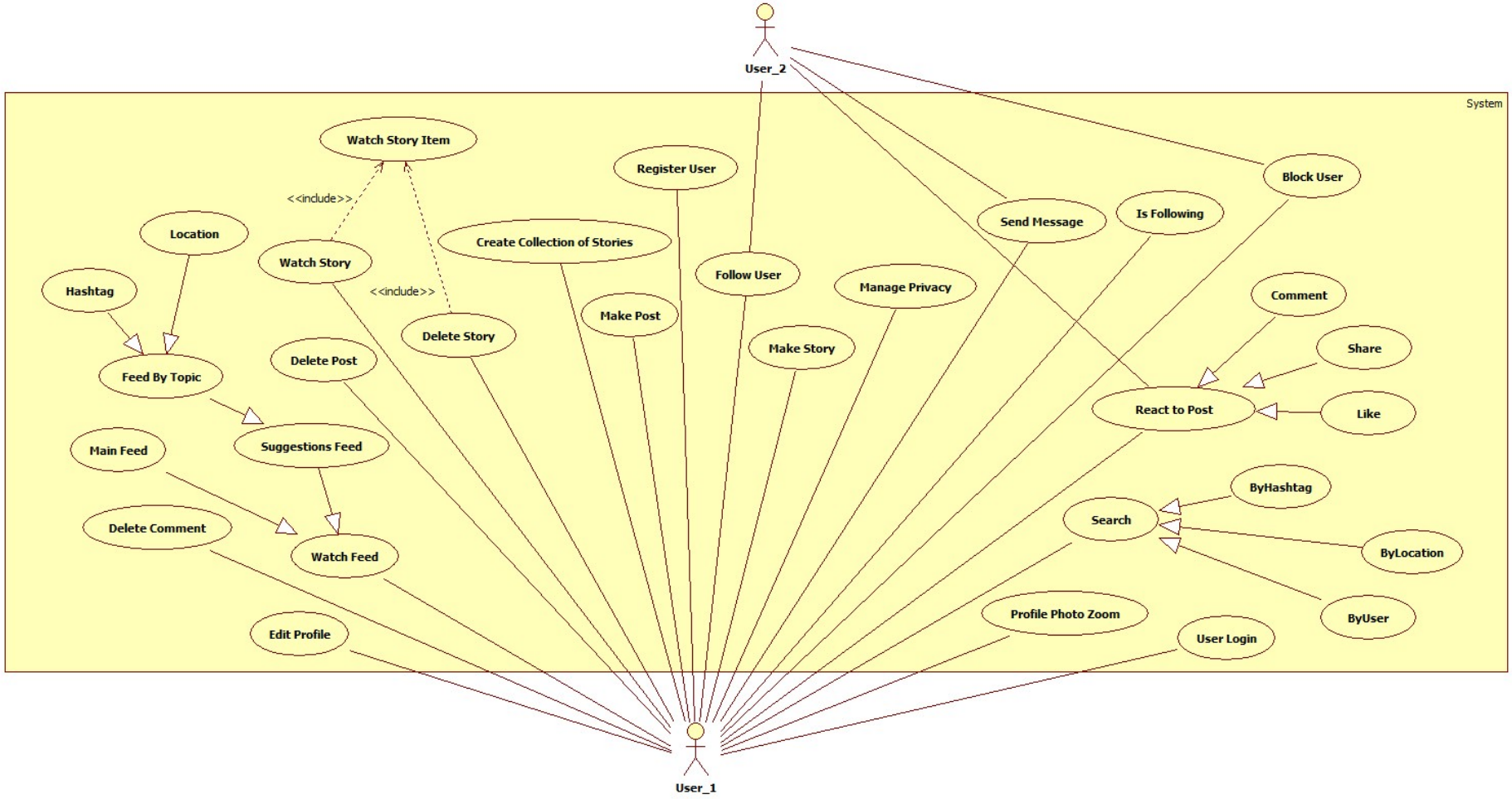
Non-Functional Requirements

- Availability
- Security
- Data Integrity
- Compatibility
- Usability
- Privacy

New Functionalities

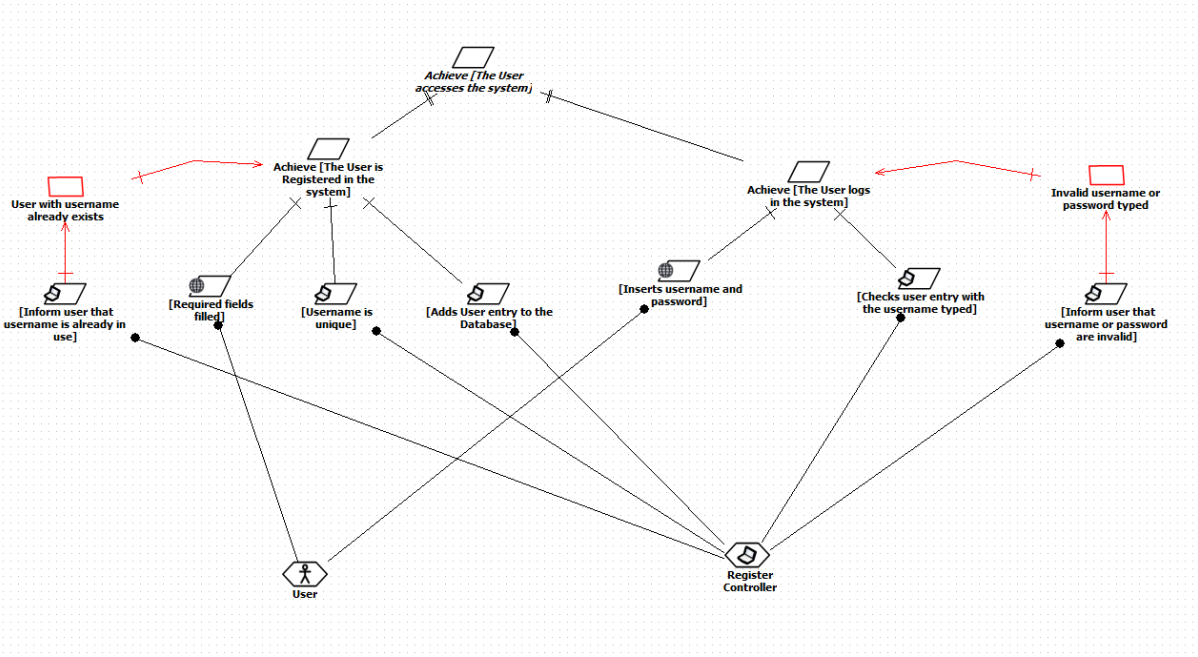
- Zoom in User Photo
- Check if User is Following

Use Case Model

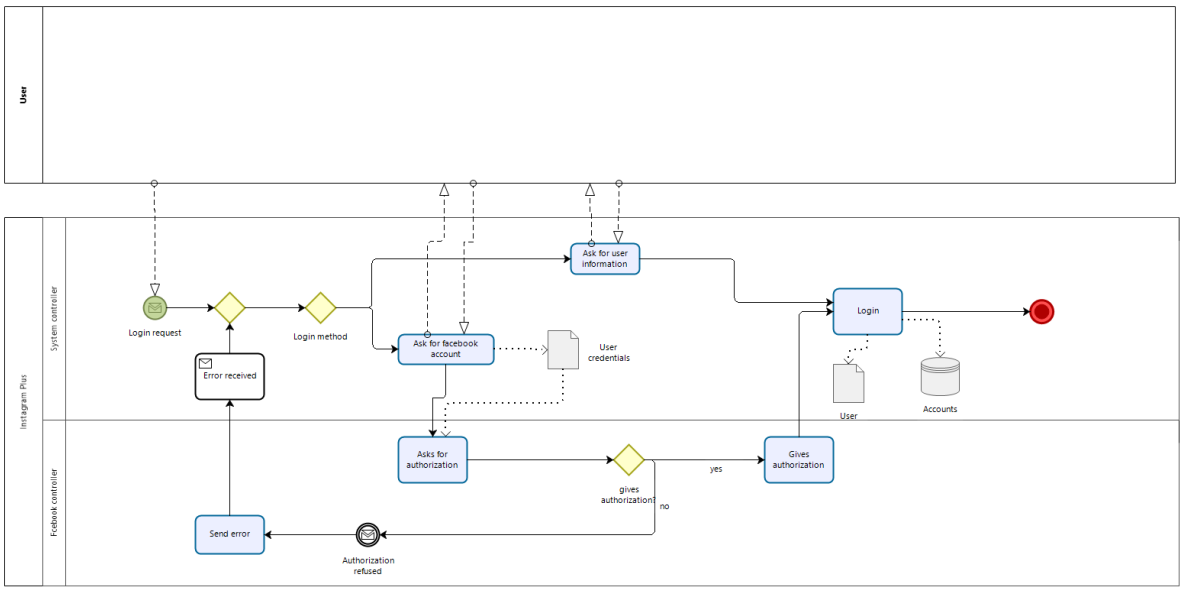


KAOS and BPMN Models

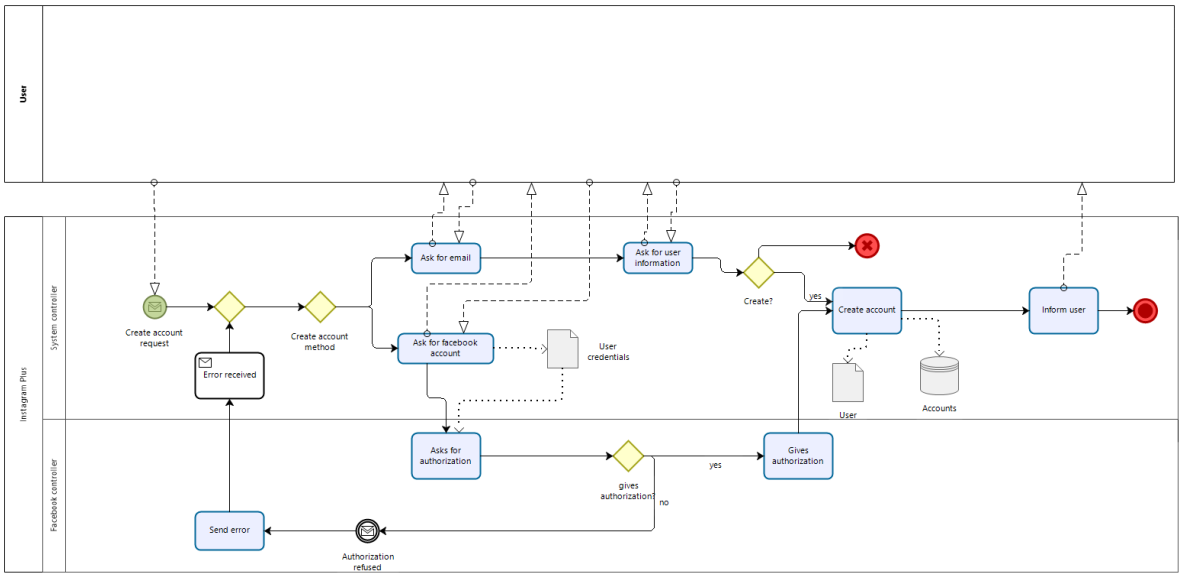
Register User and Login



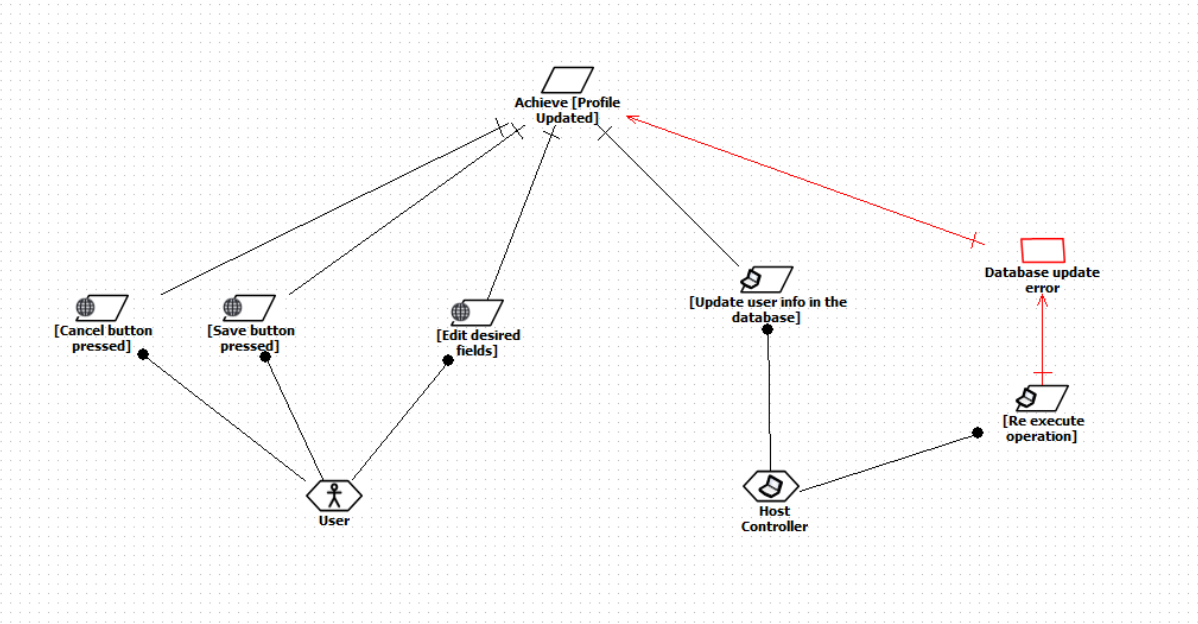
Login

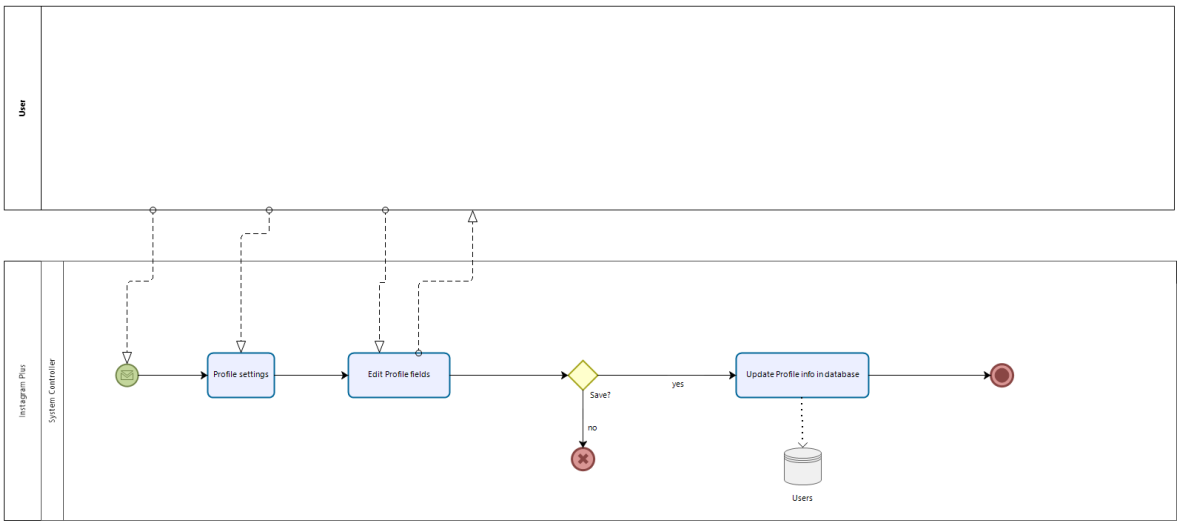


Register

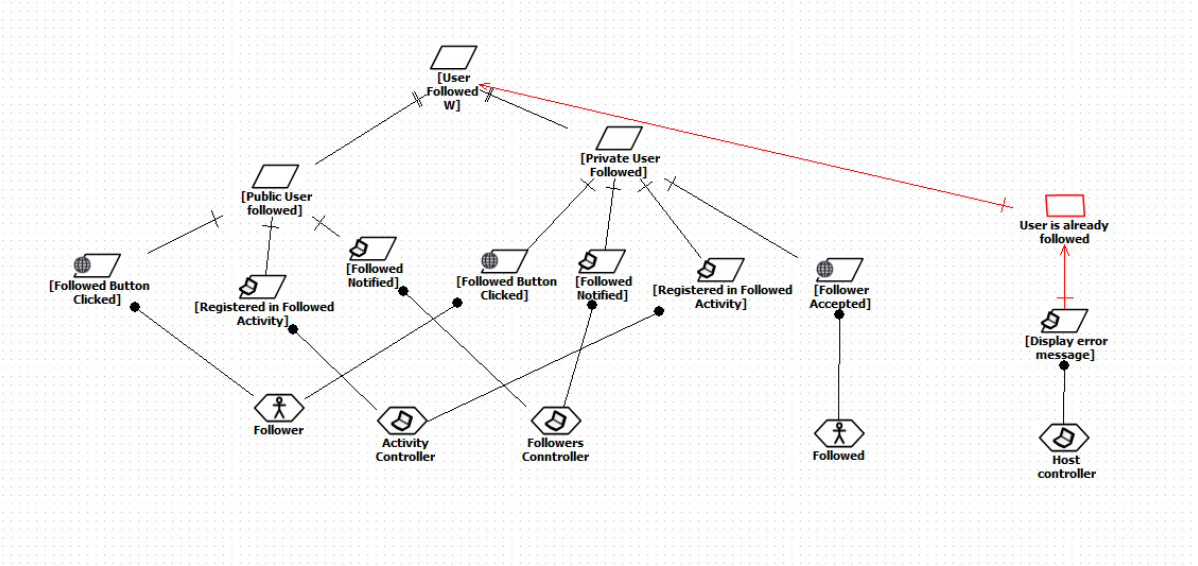

User
Instagram Plus
System controller
Facebook controller
Create account request
Error received
Create account method
Ask for email
Ask for facebook account
User credentials
Ask for user information
Create?
yes
Create account
User
Accounts
Inform user
Asks for authorization
gives authorization?
yes
no
Gives authorization
Send error
Authorization refused

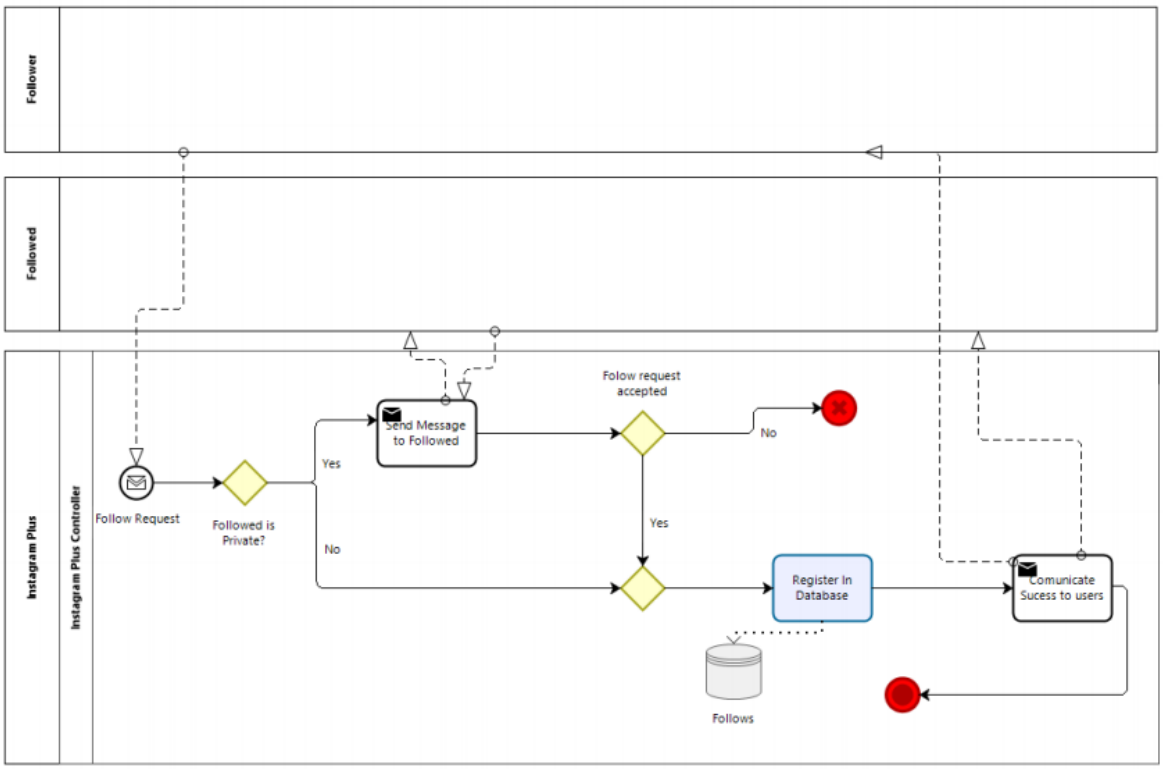
Edit Profile



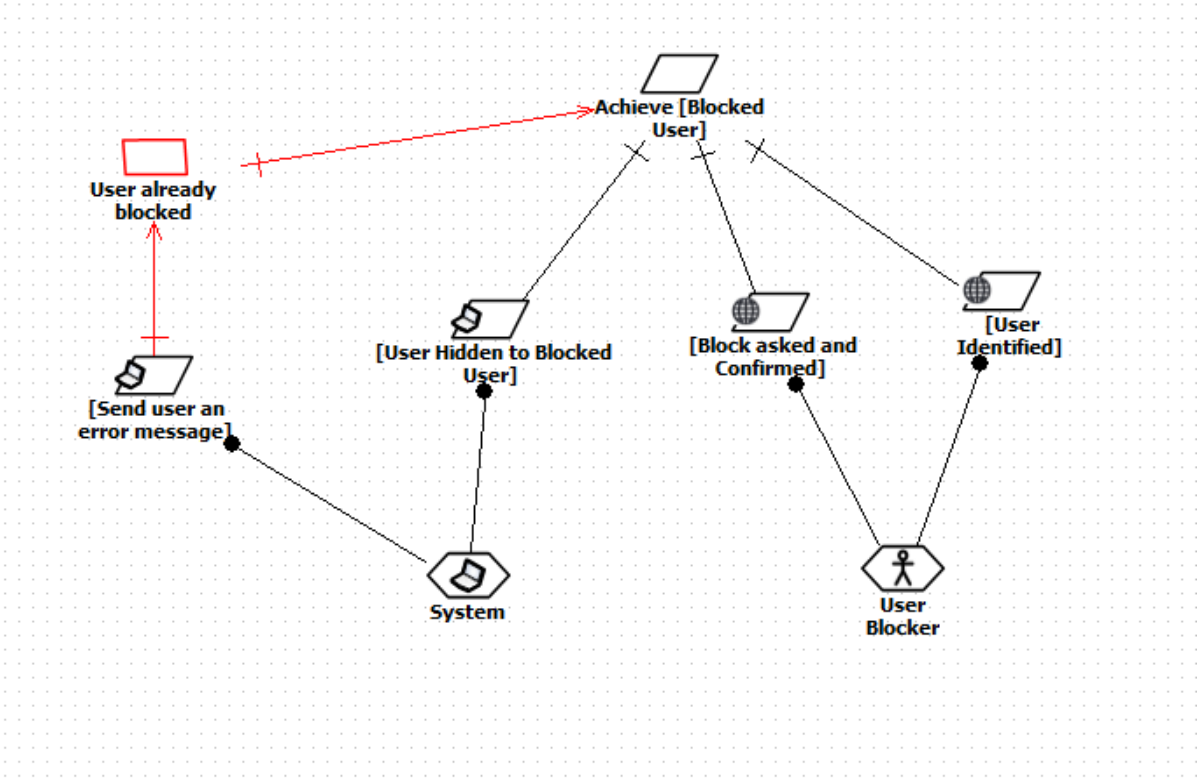


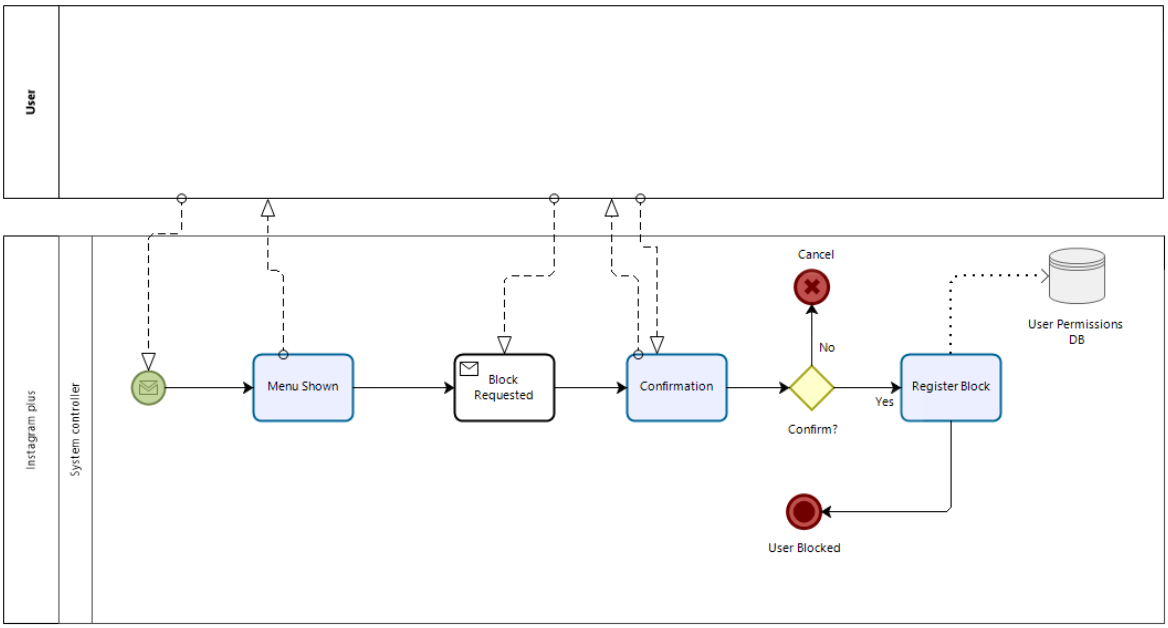
Follow User


[User Followed W]
[Public User followed]
[Private User Followed]
User is already followed
[Followed Button Clicked]
[Registered in Followed Activity]
[Followed Notified]
[Followed Button Clicked]
[Followed Notified]
[Registered in Followed Activity]
[Follower Accepted]
[Display error message]
Follower
Activity Controller
Followers Conntroller
Followed
Host controller

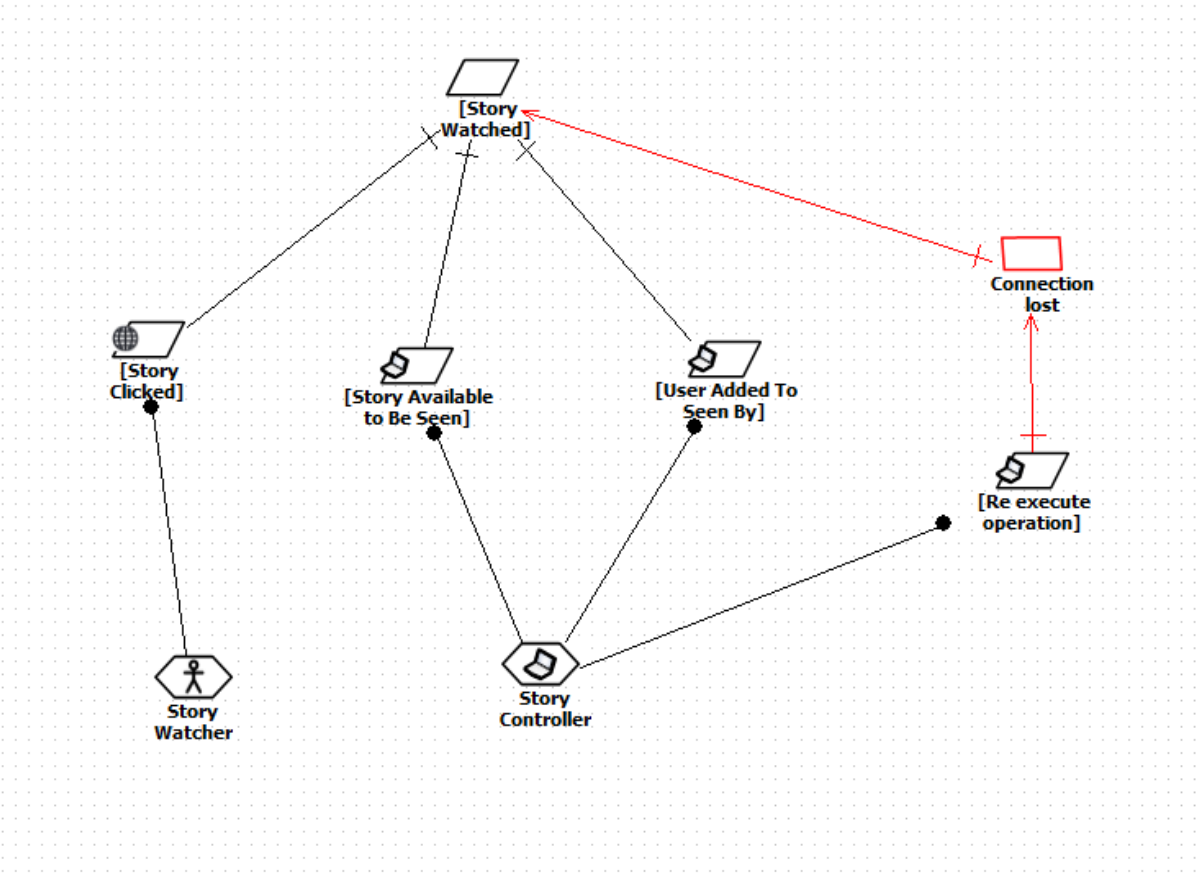

Follower
Followed
Instagram Plus
Instagram Plus Controller
Follow Request
Followed is Private?
Yes
No
Send Message to Followed
Follow request accepted
No
Yes
Register In Database
Comunicate Sucess to users
Follows

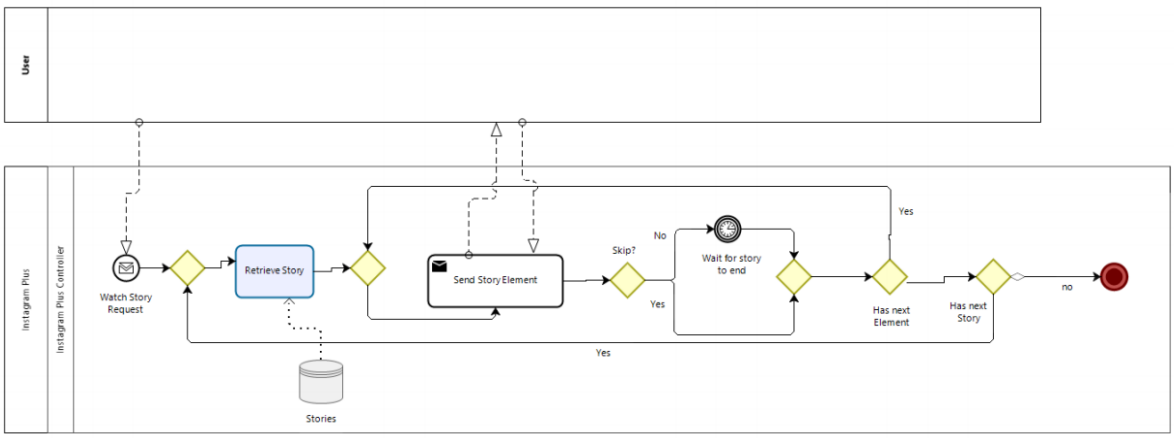
Block User


Achieve [Blocked User]
User already blocked
[Send user an error message]
[User Hidden to Blocked User]
[Block asked and Confirmed]
[User Identified]
System
User Blocker

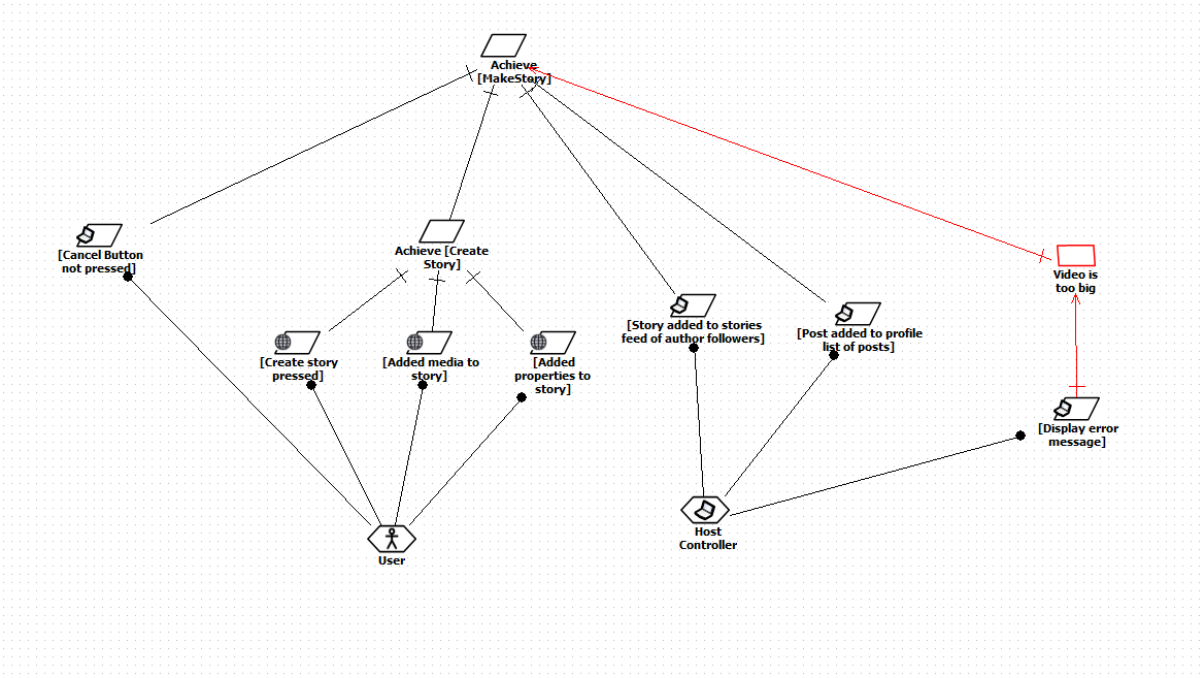

User
Instagram plus
System controller
Menu Shown
Block Requested
Confirmation
Cancel
No
Confirm?
Yes
Register Block
User Permissions DB
User Blocked

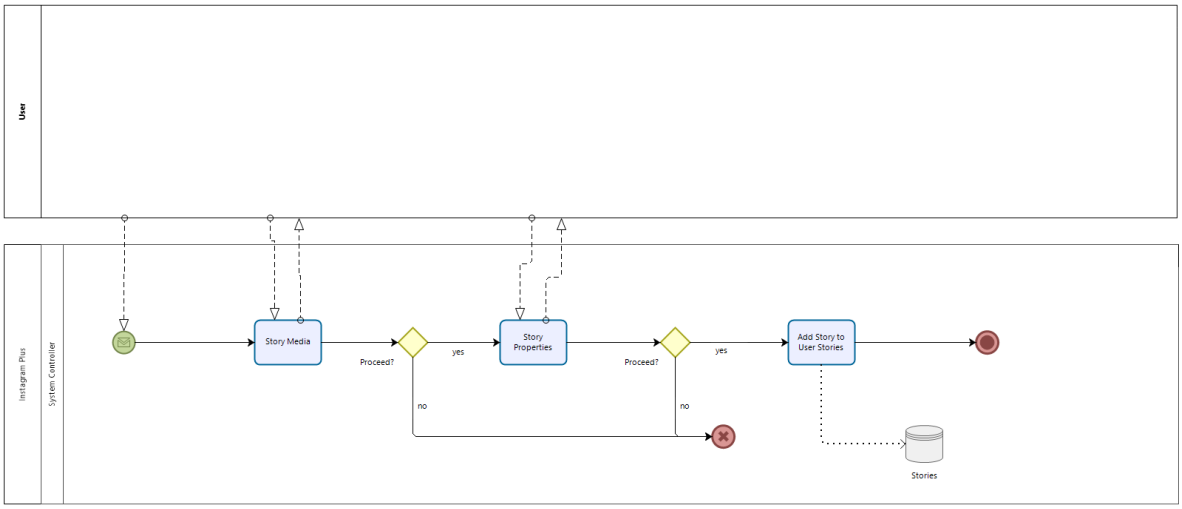
Watch Story


[Story Watched]
Connection lost
[Story Clicked]
[Story Available to Be Seen]
[User Added To Seen By]
[Re execute operation]
Story Watcher
Story Controller

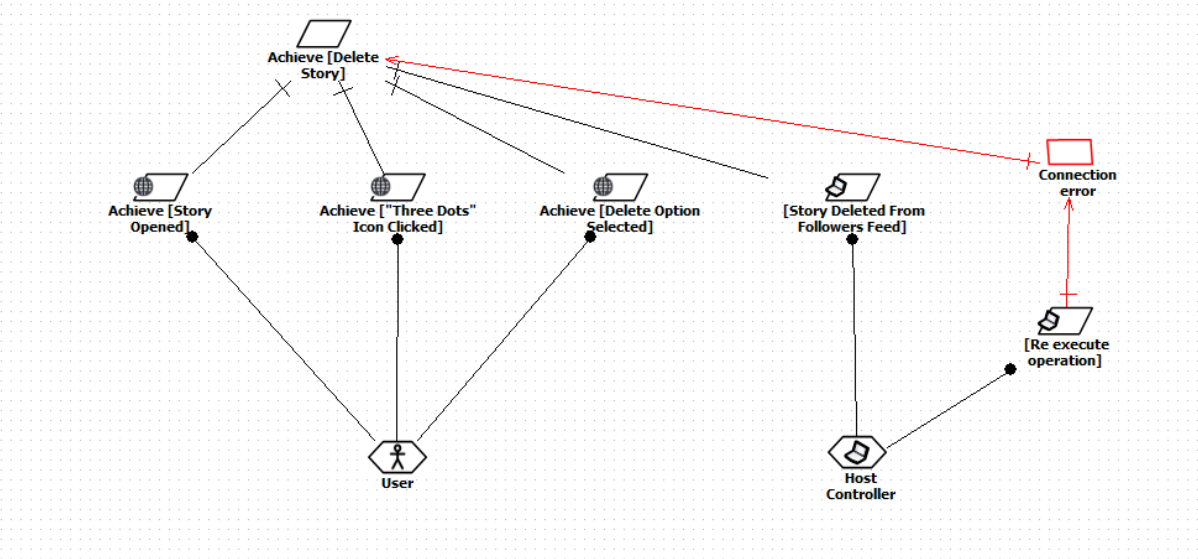

User
Instagram Plus
Instagram Plus Controller
Watch Story Request
Retrieve Story
Send Story Element
Skip?
No
Yes
Wait for story to end
Yes
Has next Element
Has next Story
no
Yes
Stories

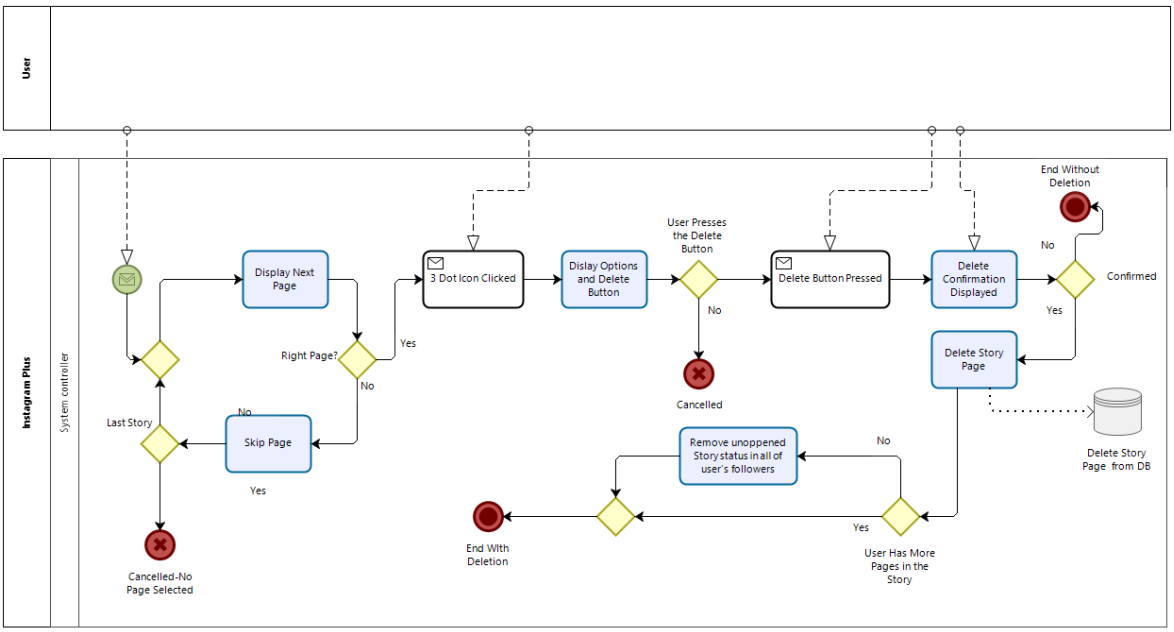
Make Story


Achieve [MakeStory]
[Cancel Button not pressed]
Achieve [Create Story]
[Create story pressed]
[Added media to story]
[Added properties to story]
[Story added to stories feed of author followers]
[Post added to profile list of posts]
Video is too big
[Display error message]
User
Host Controller

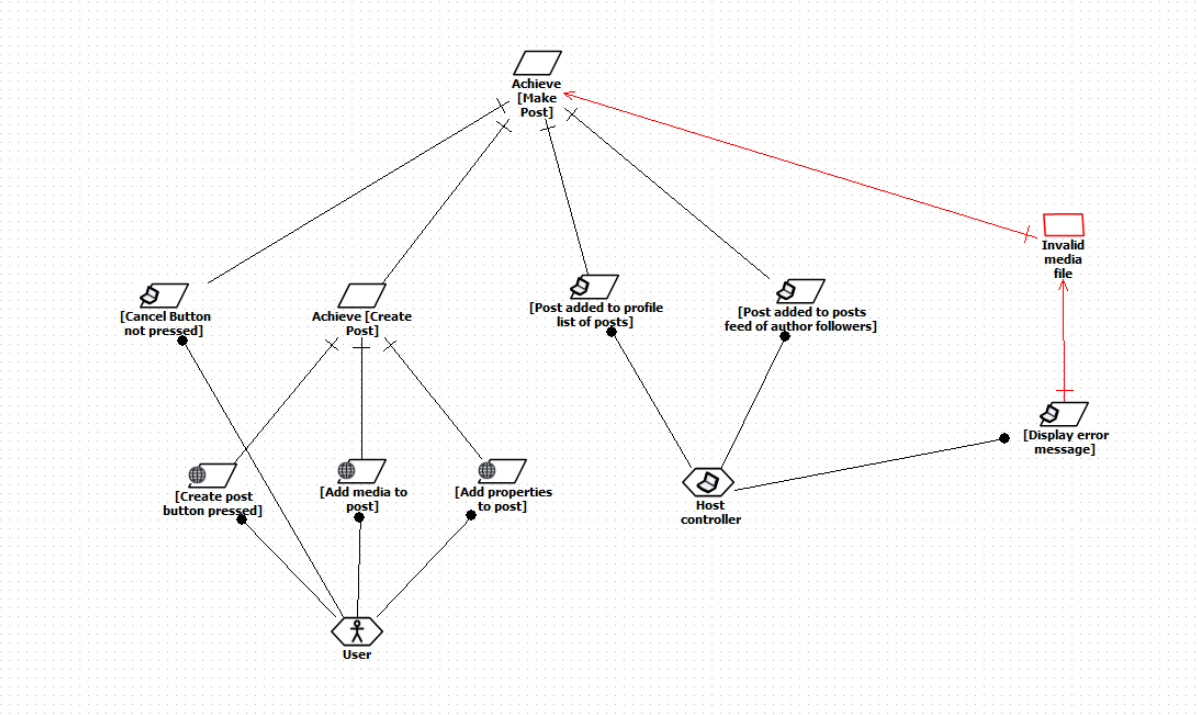

User
Instagram Plus
System Controller
Story Media
Proceed?
yes
no
Story Properties
Proceed?
yes
no
Add Story to User Stories
Stories

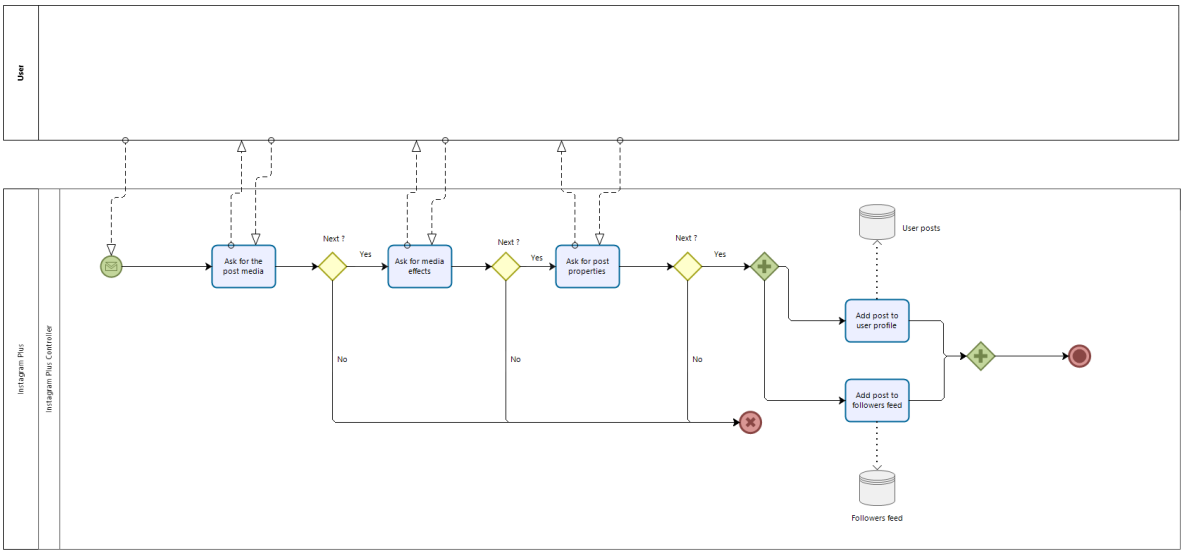
Delete Story



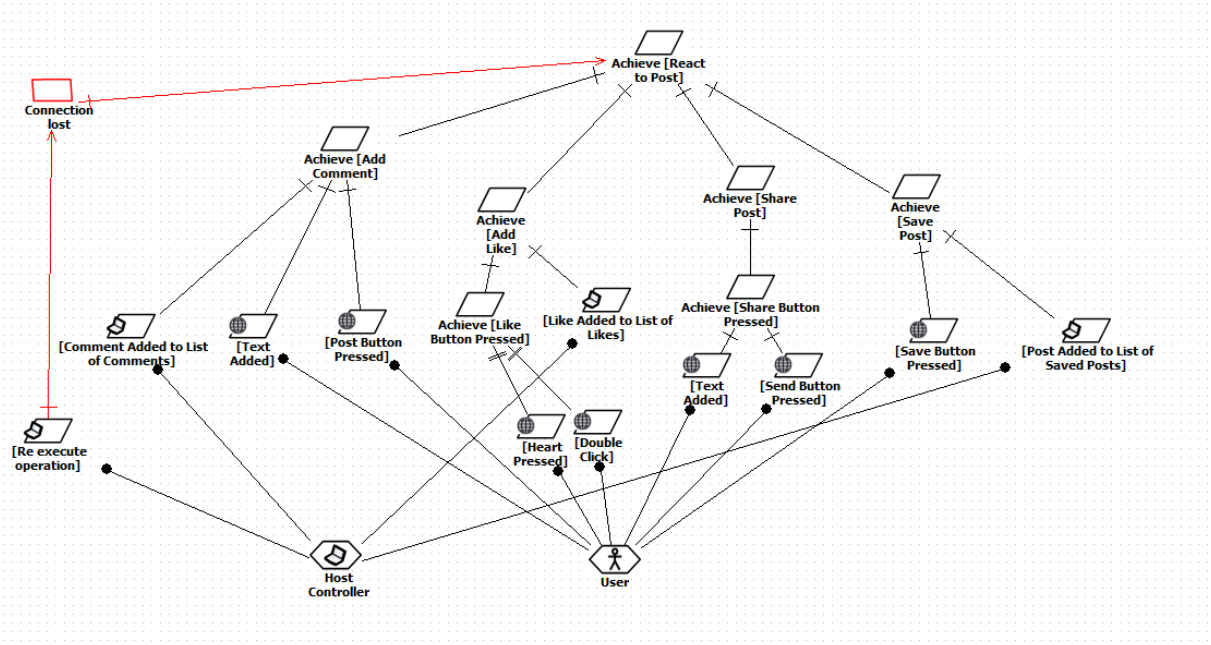


Make Post

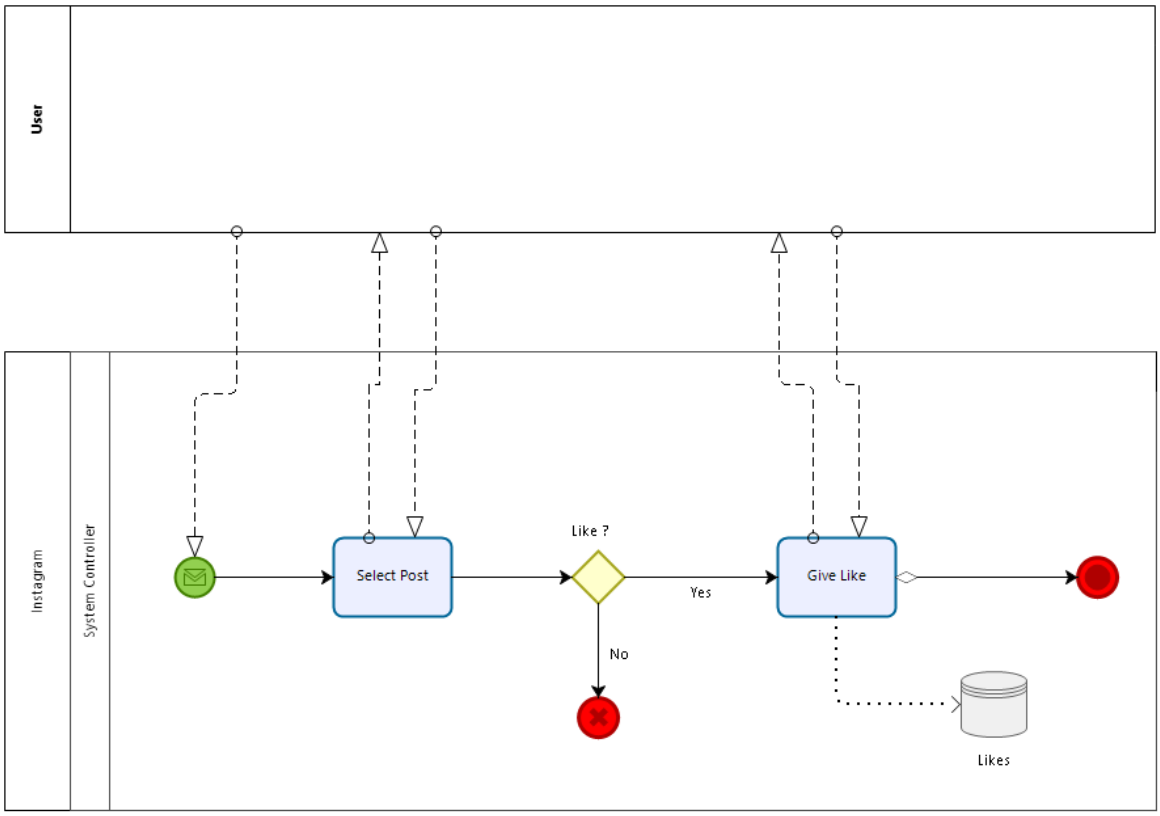

Achieve [Make Post]
[Cancel Button not pressed]
Achieve [Create Post]
[Post added to profile list of posts]
[Post added to posts feed of author followers]
Invalid media file
[Display error message]
[Create post button pressed]
[Add media to post]
[Add properties to post]
Host controller
User


User
Instagram Plus
Instagram Plus Controller
Ask for the post media
Next ?
Yes
No
Ask for media effects
Ask for post properties
User posts
Add post to user profile
Add post to followers feed
Followers feed

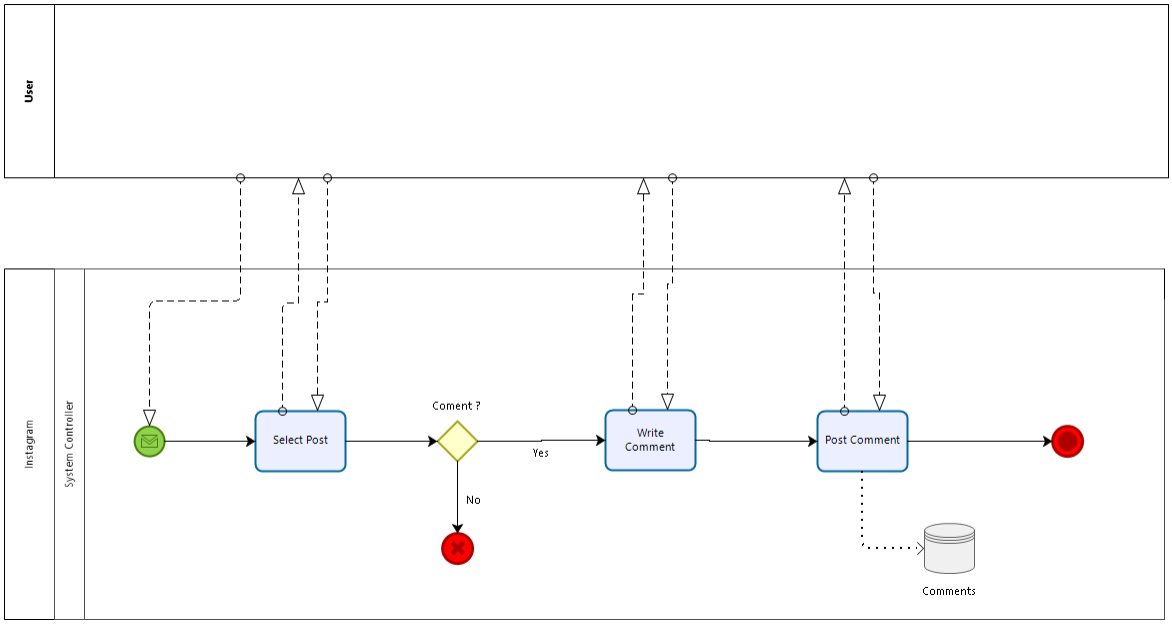
React to Post



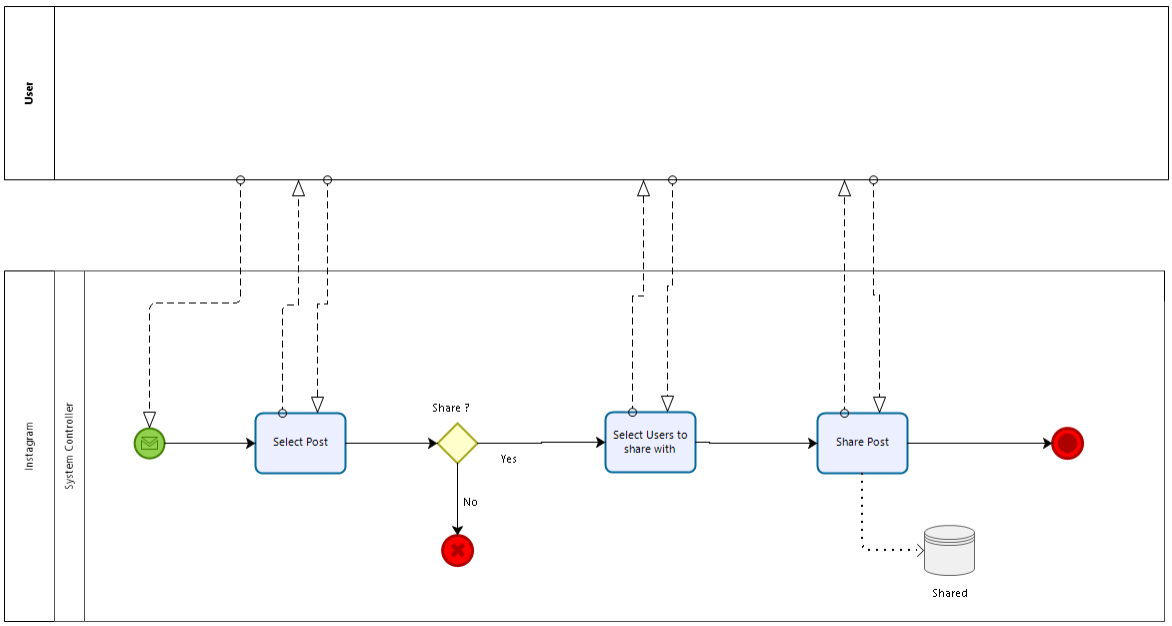
Like



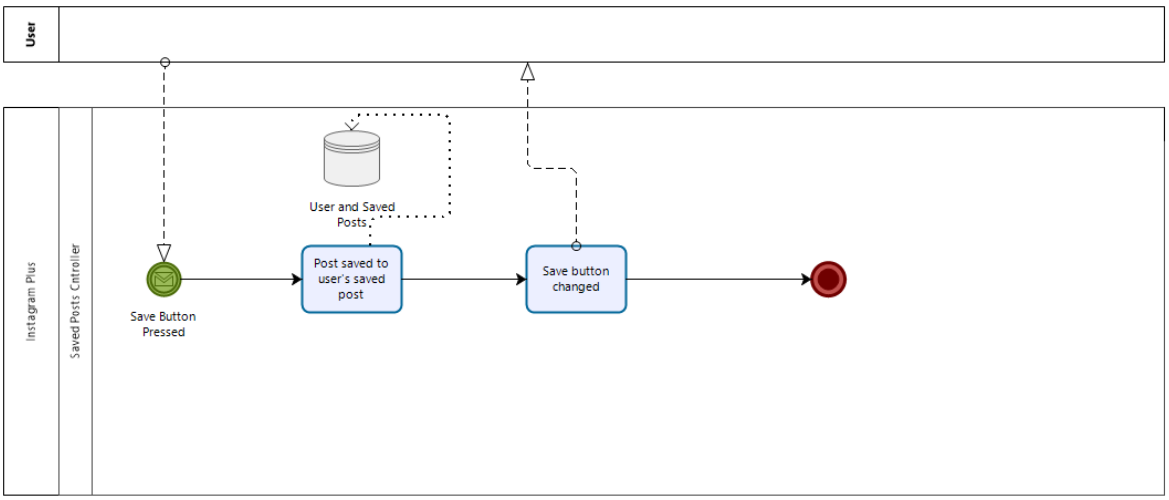
Comment



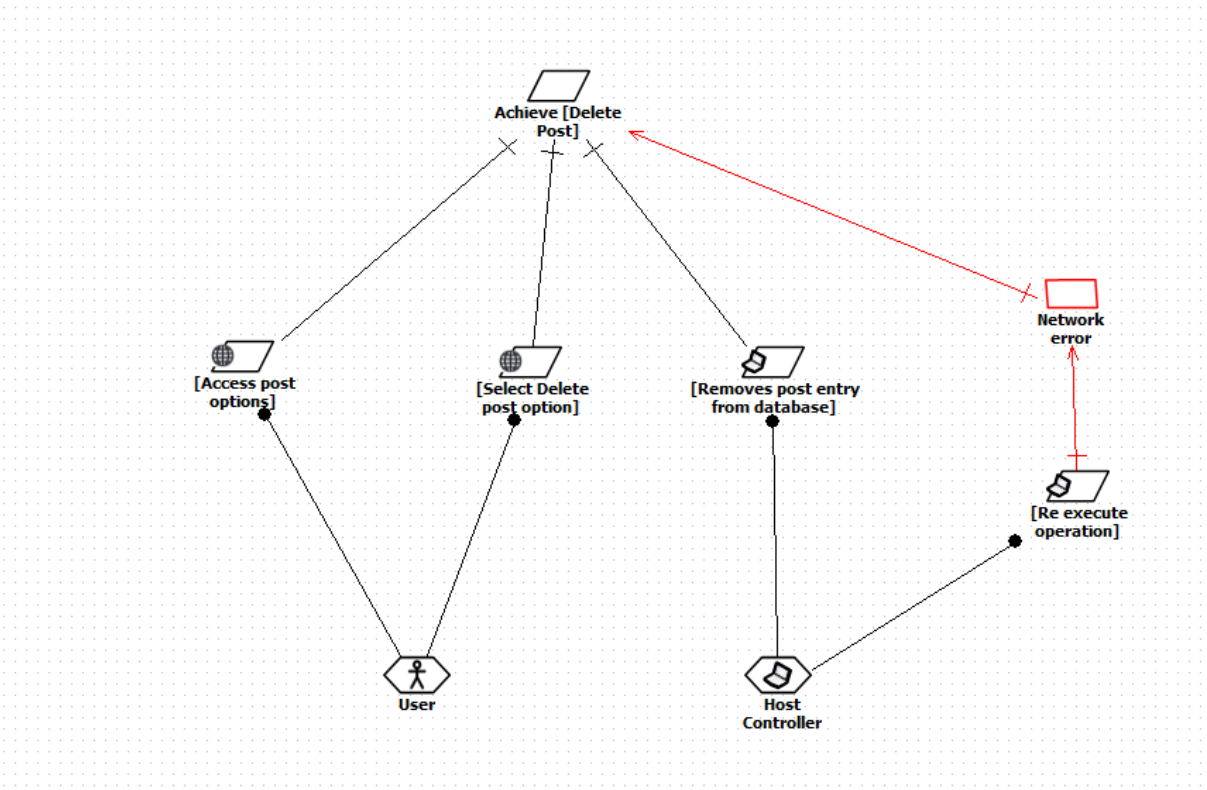
Share

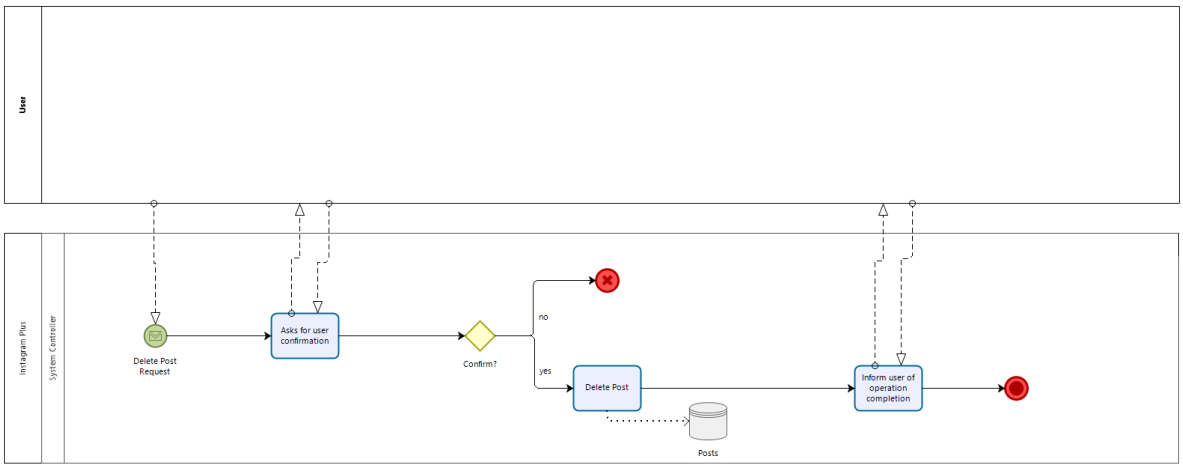


Save

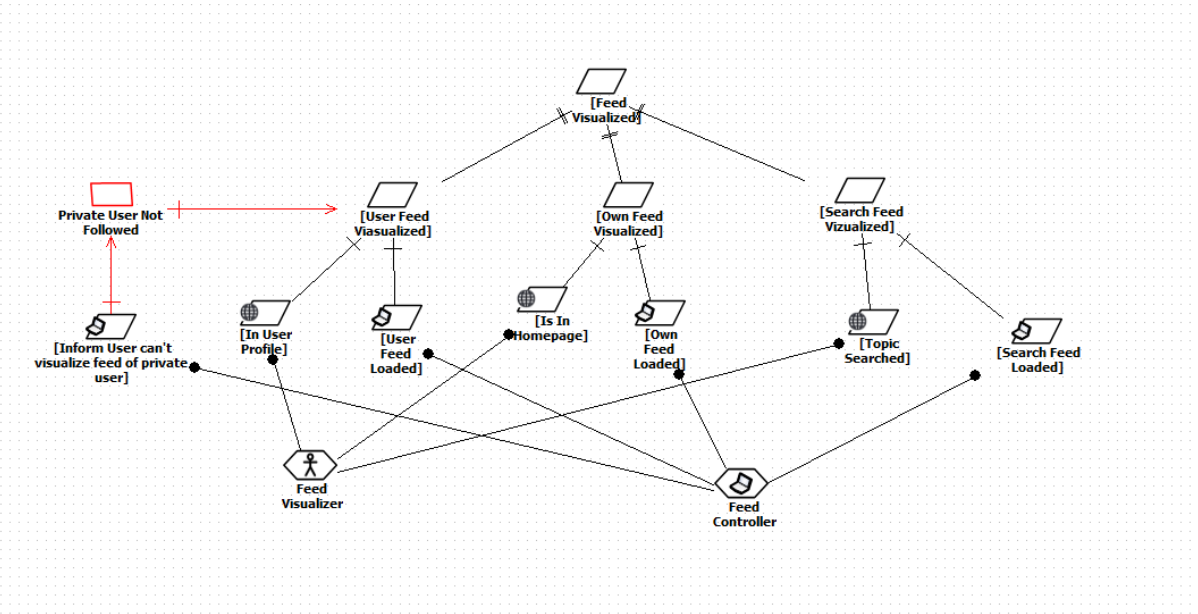

User
Instagram Plus
Saved Posts Cntroller
User and Saved Posts
Save Button Pressed
Post saved to user's saved post
Save button changed

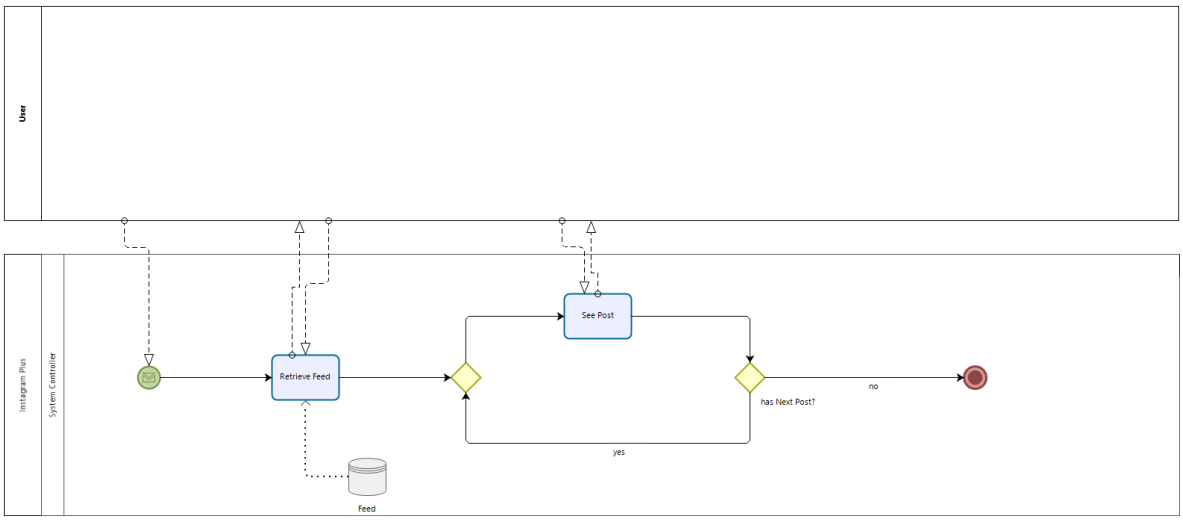
Delete Post


Achieve [Delete Post]
[Access post options]
[Select Delete post option]
[Removes post entry from database]
Network error
[Re execute operation]
User
Host Controller

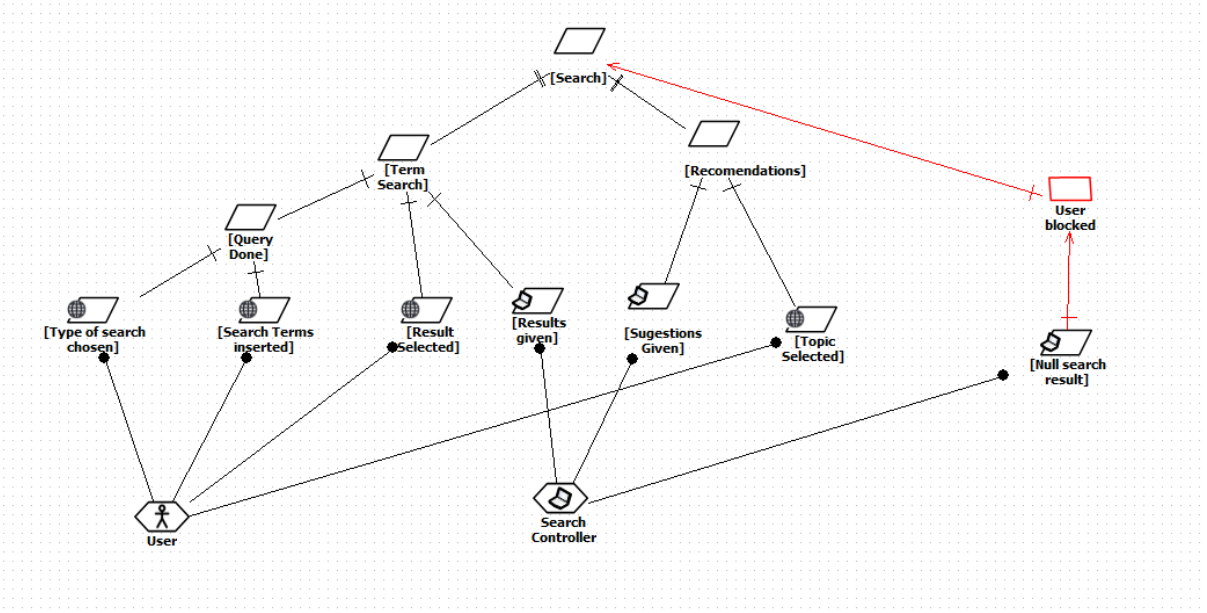

User
Instagram Plus
System Controller
Delete Post Request
Asks for user confirmation
Confirm?
no
yes
Delete Post
Posts
Inform user of operation completion

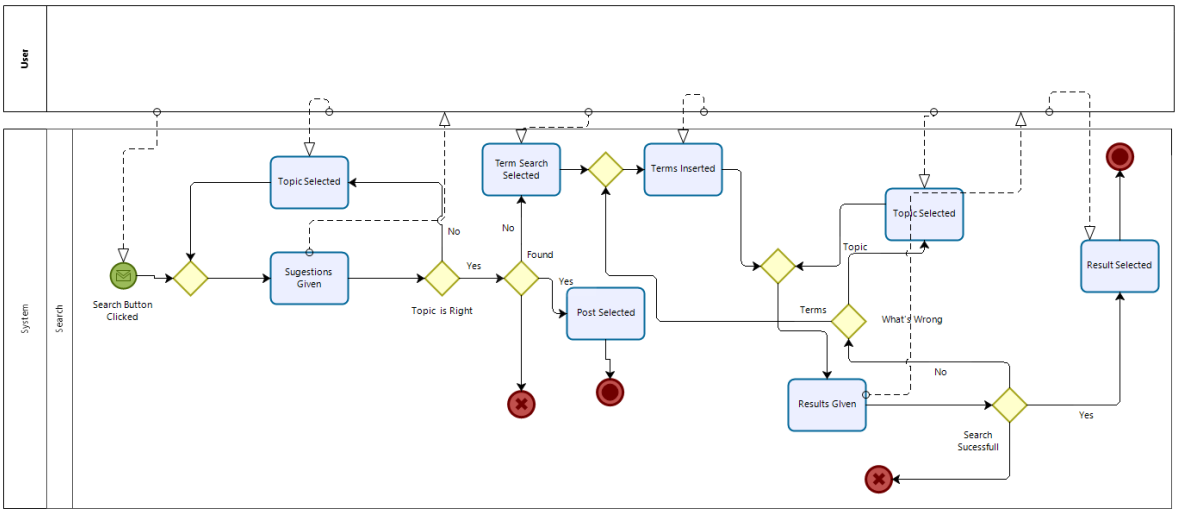
Watch Feed


[Feed Visualized]
Private User Not Followed
[User Feed Viasualized]
[Own Feed Visualized]
[Search Feed Vizualized]
[Inform User can't visualize feed of private user]
[In User Profile]
[User Feed Loaded]
[Is In Homepage]
[Own Feed Loaded]
[Topic Searched]
[Search Feed Loaded]
Feed Visualizer
Feed Controller

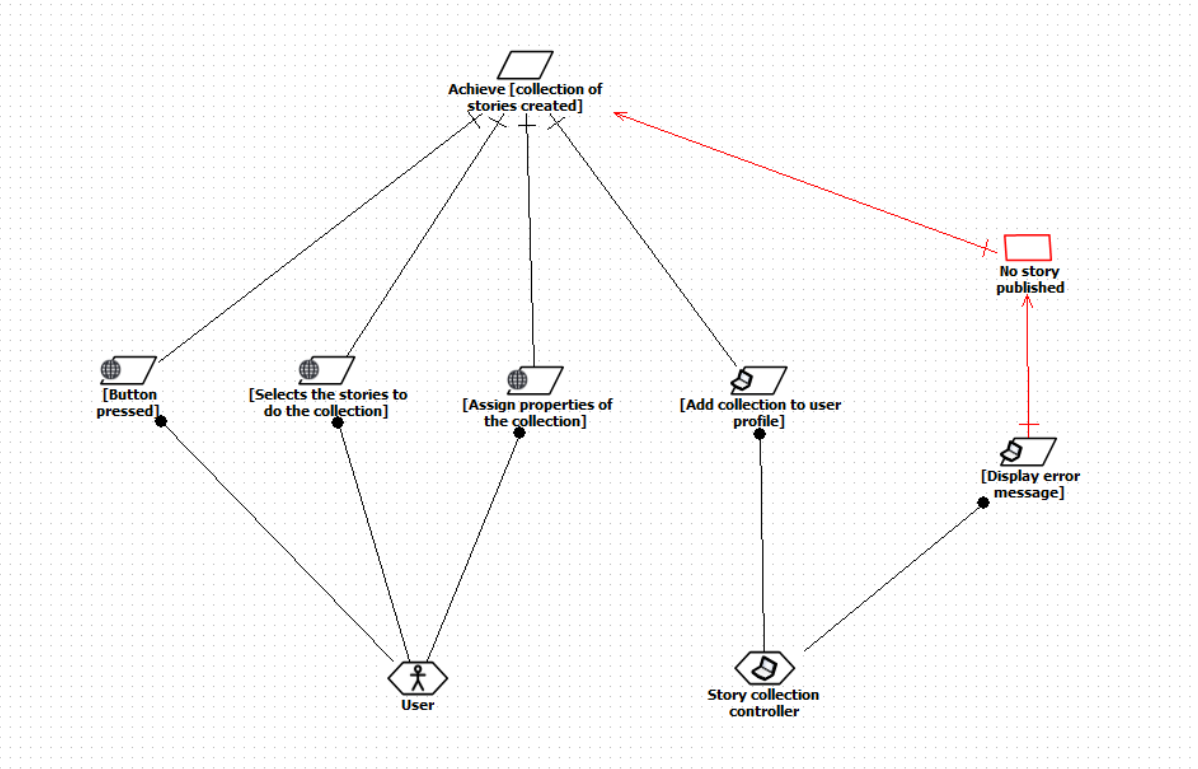

User
Instagram Plus
Syrten Controller
Retrieve Feed
See Post
has Next Post?
no
yes
Feed

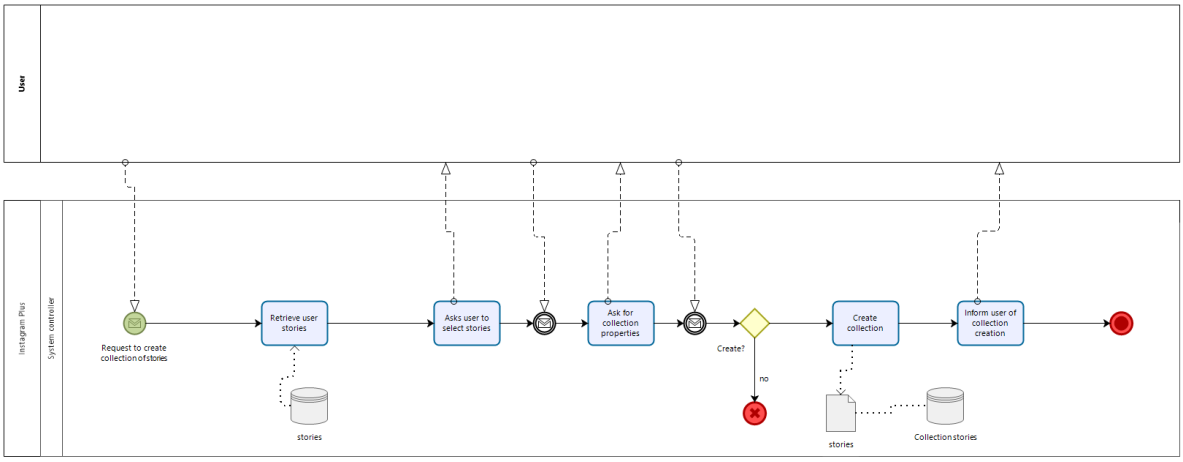
Search


[Search]
[Term Search]
[Recomendations]
[Query Done]
User blocked
[Type of search chosen]
[Search Terms inserted]
[Result Selected]
[Results given]
[Sugestions Given]
[Topic Selected]
[Null search result]
User
Search Controller

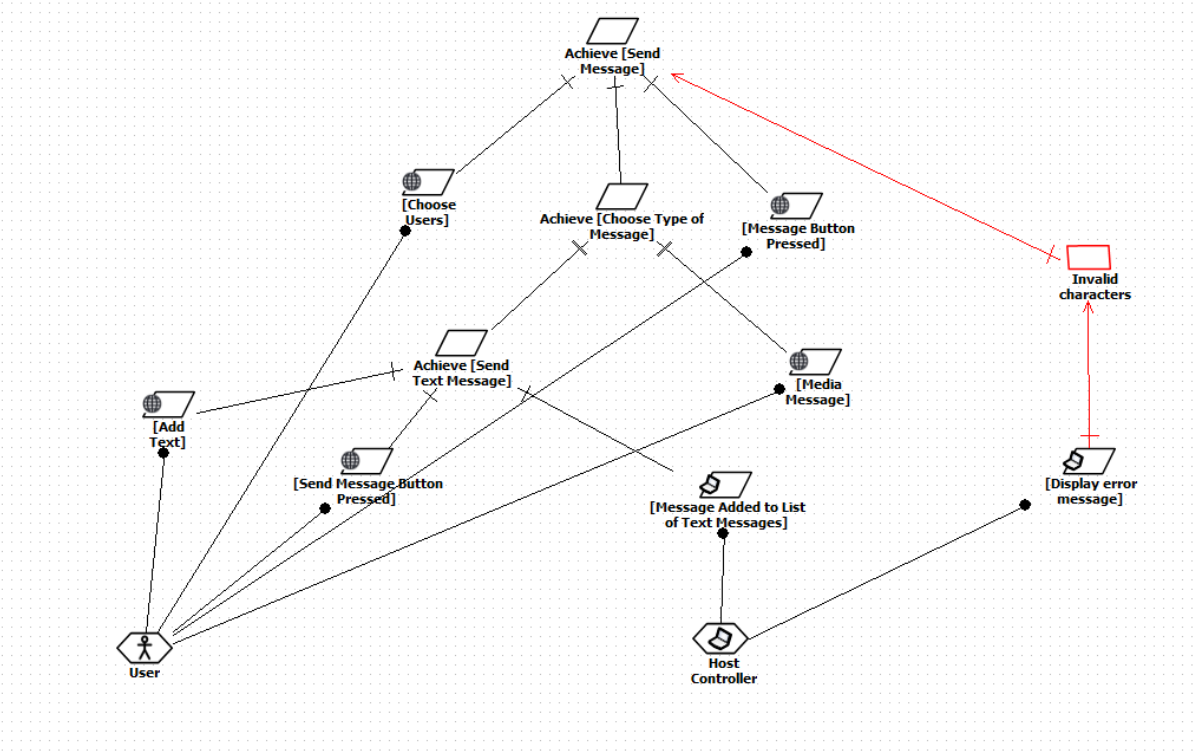

User
System
Search
Topic Selected
Term Search Selected
Terms Inserted
Topic Selected
Result Selected
Search Button Clicked
Sugestions Given
Topic is Right
Post Selected
Results Given
What's Wrong
Search Sucessfull
No
Yes
Found
Topic
Terms

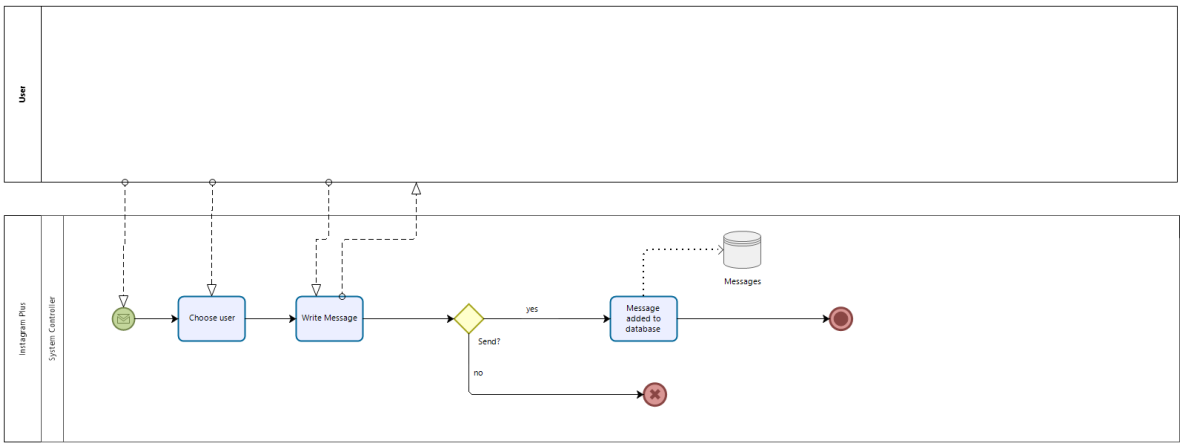
Create Collection of Stories



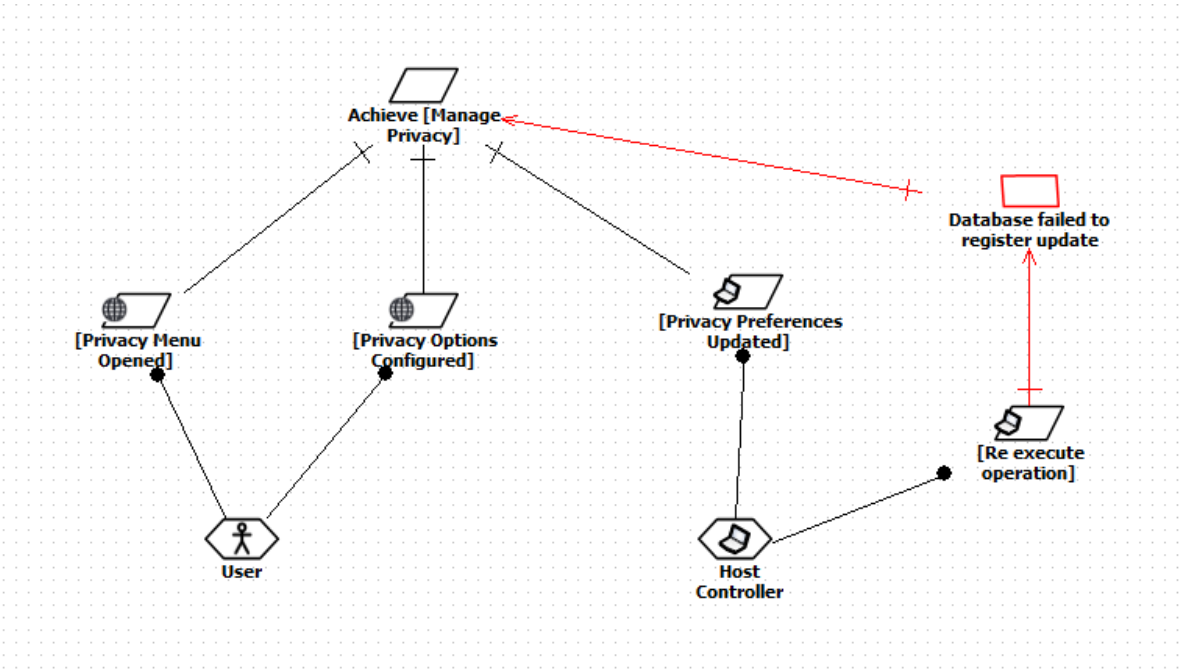


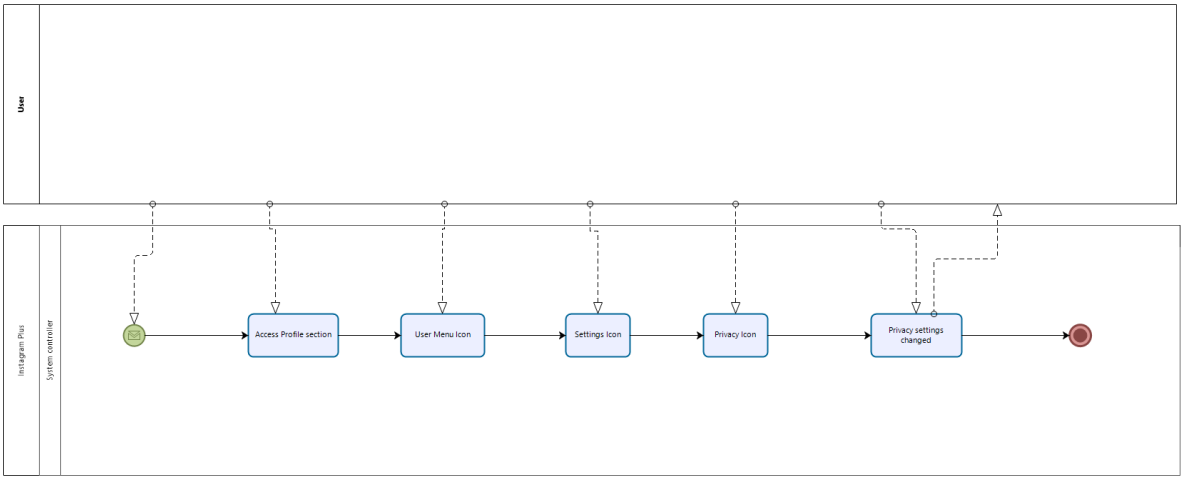
Send Message



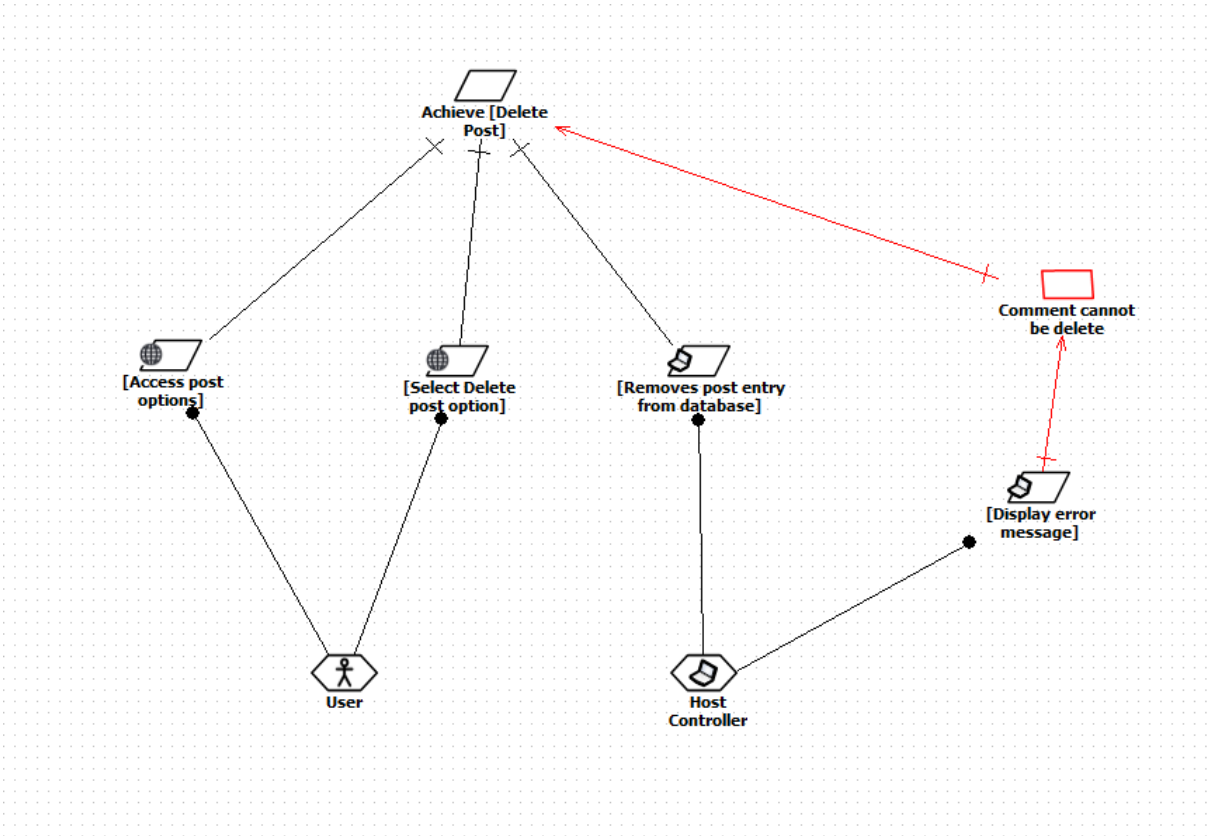


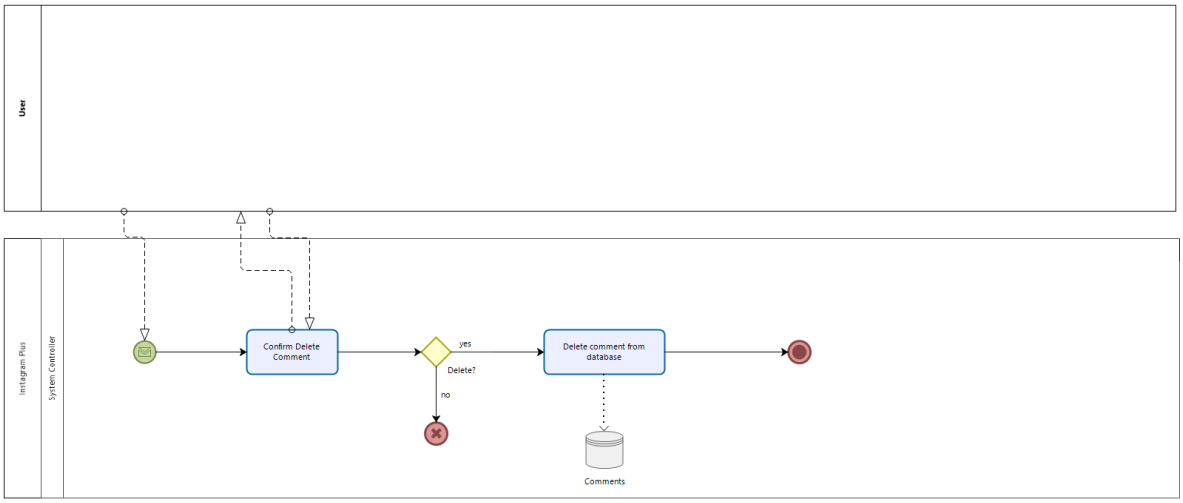
Manage Privacy



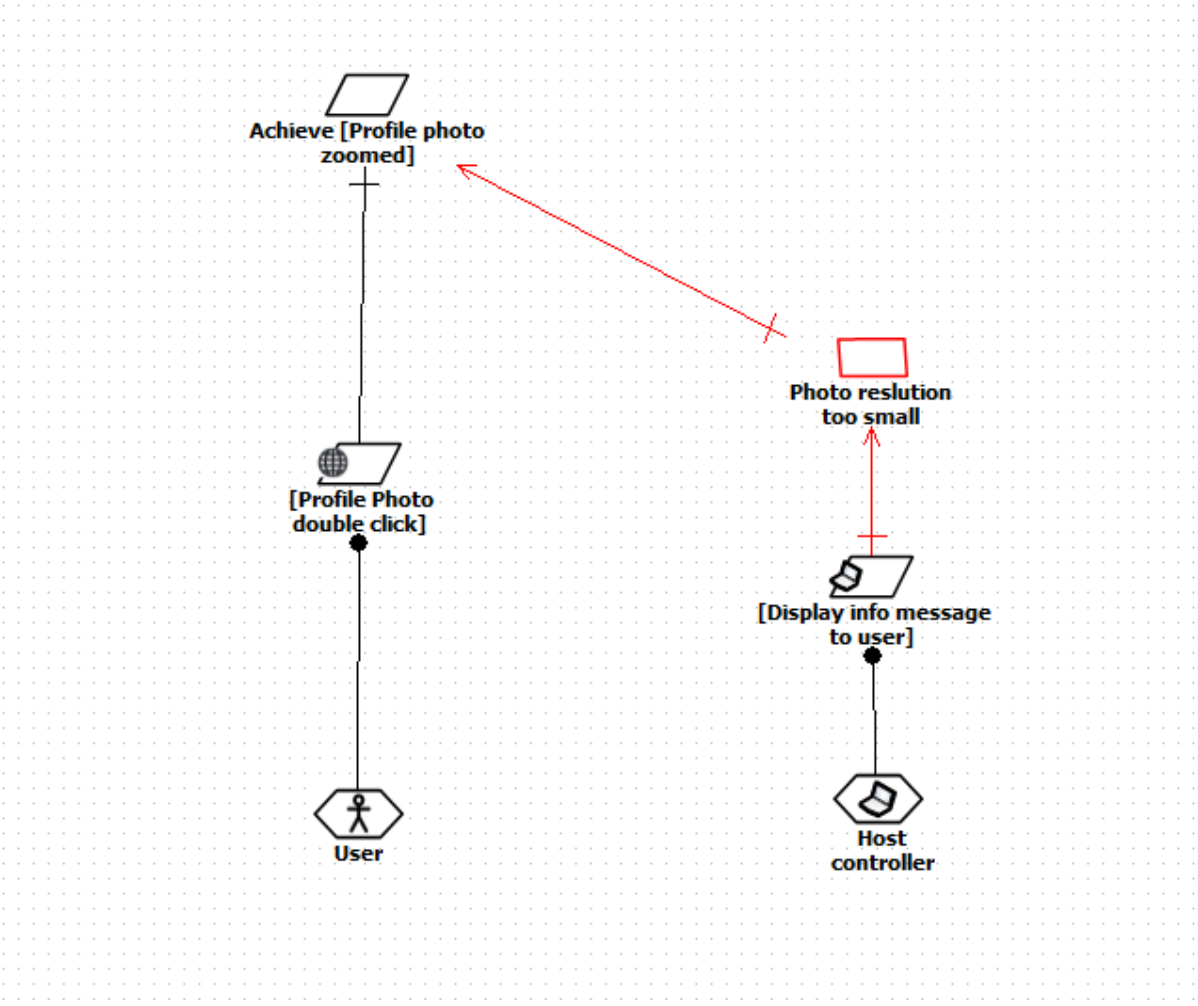


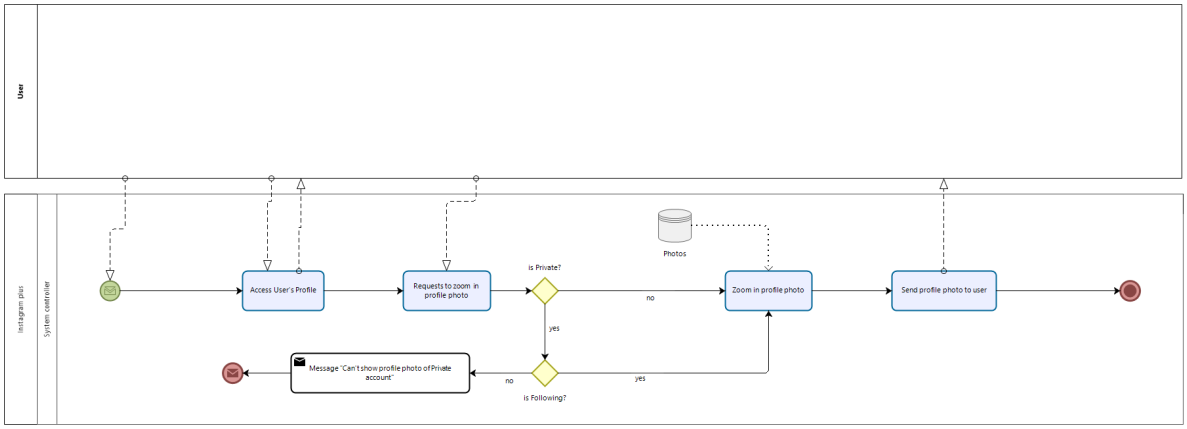
Delete Comment



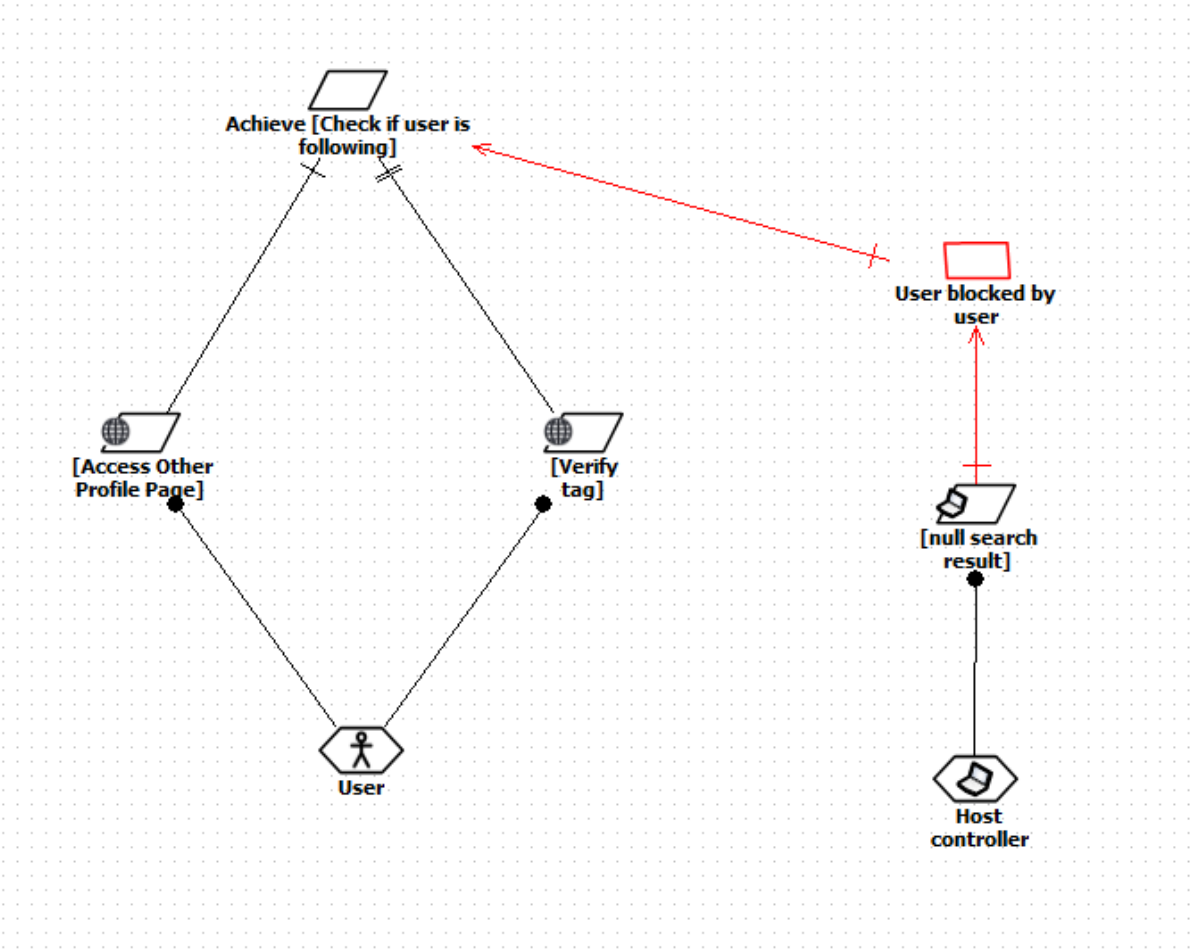


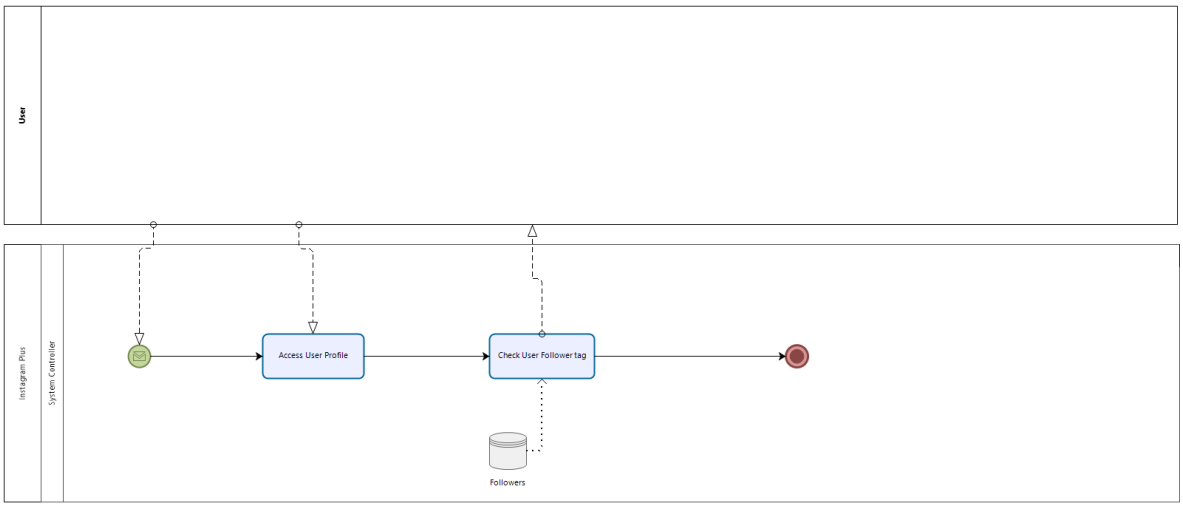
Zoom in User Photo



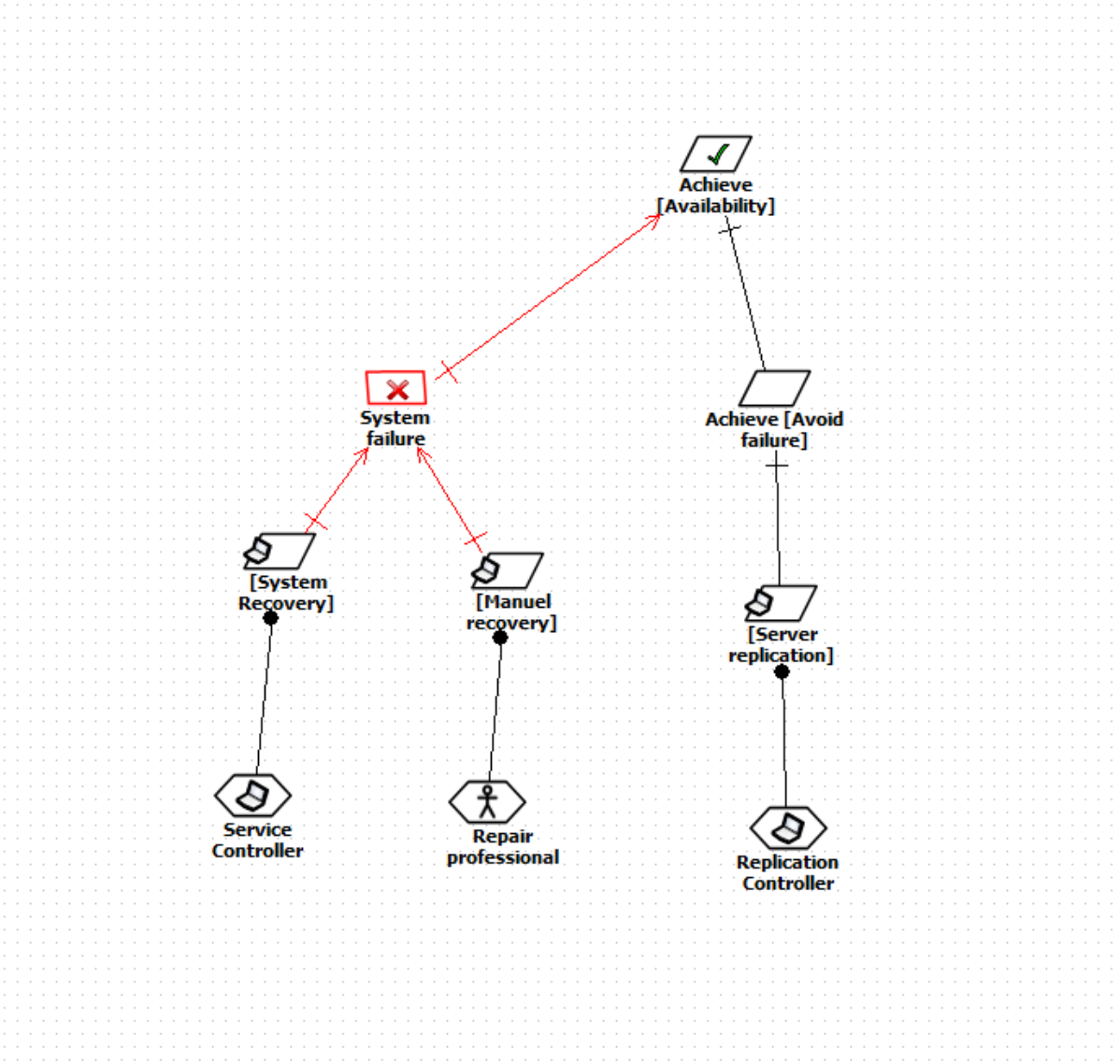


Check if User is Following

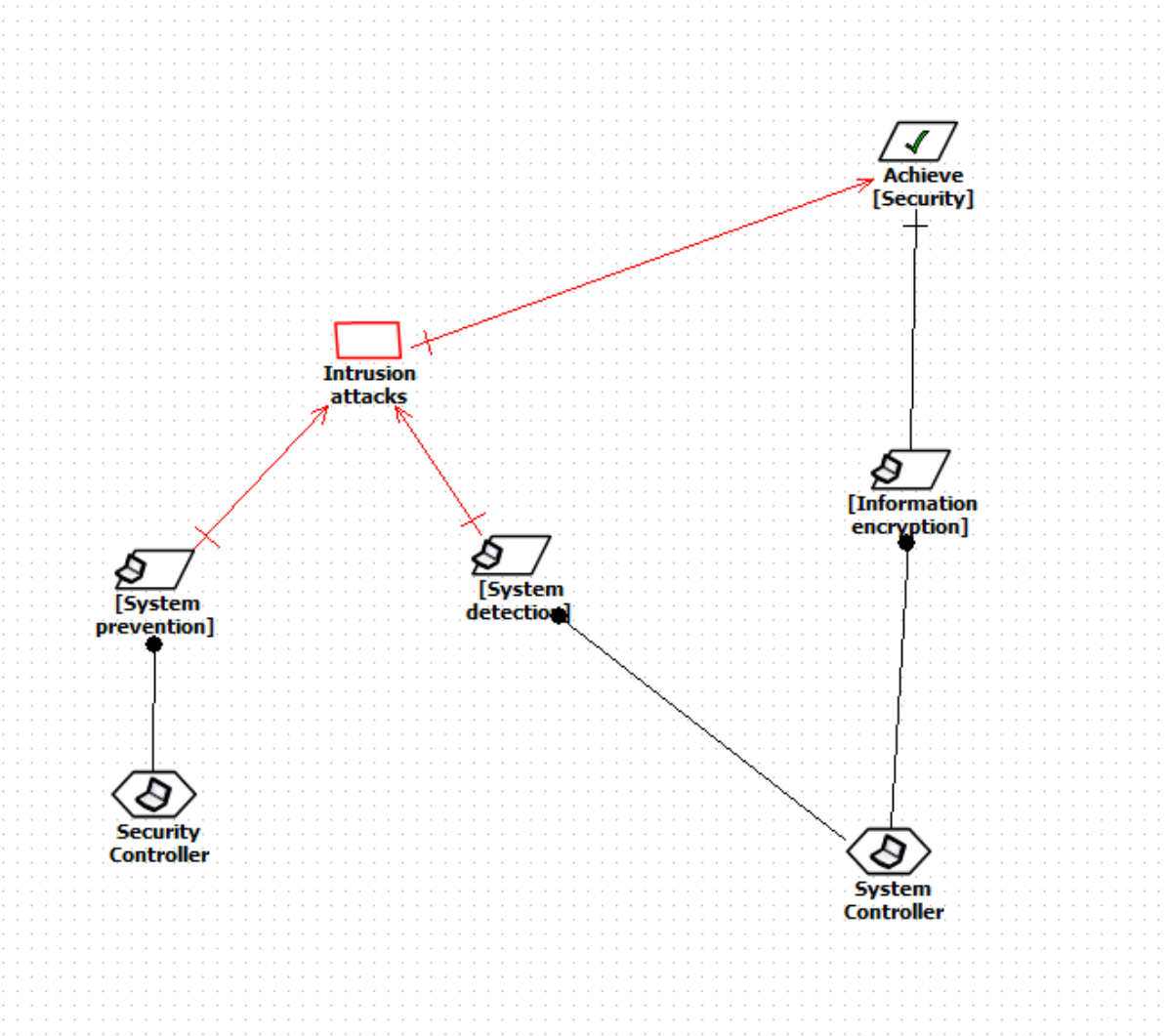




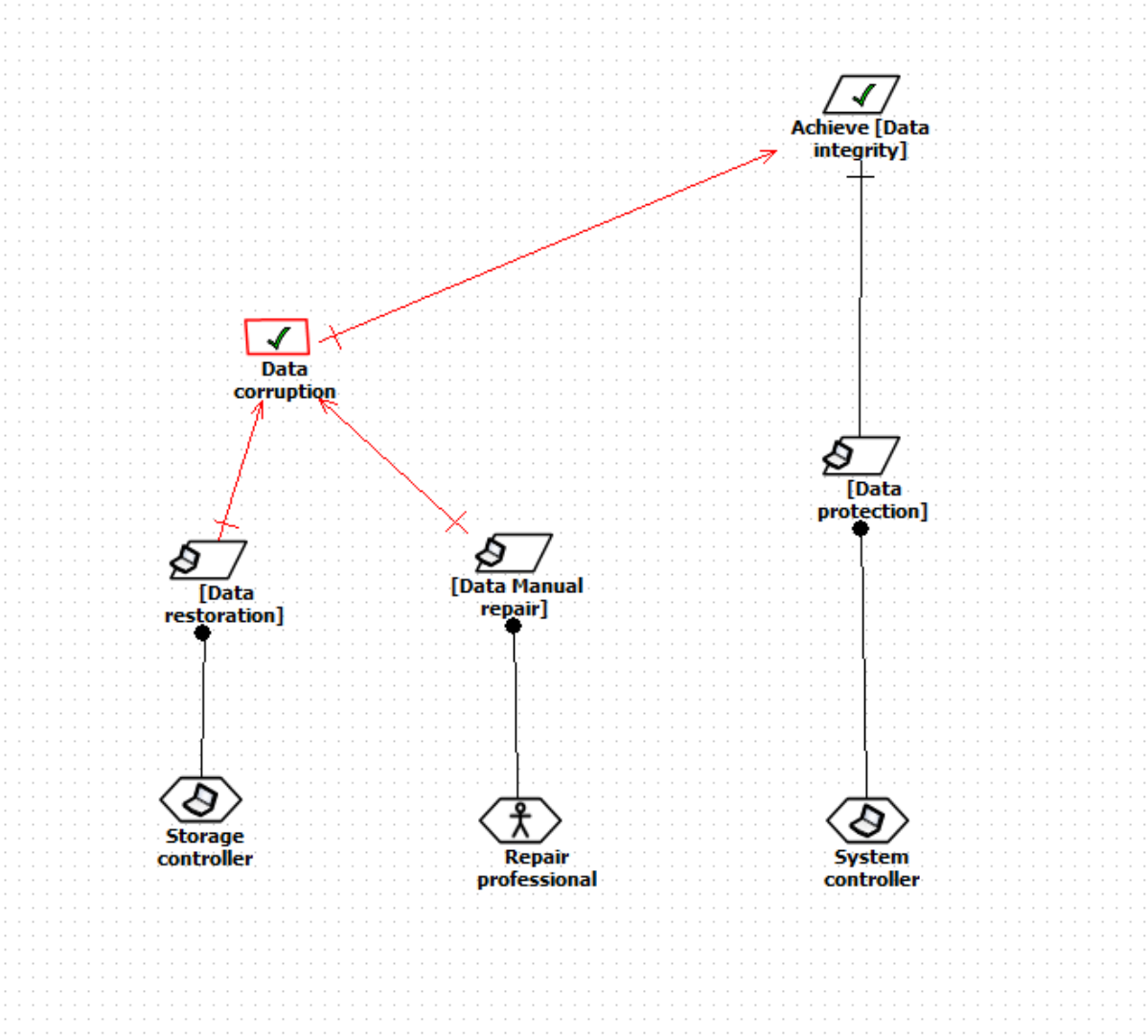
Availability



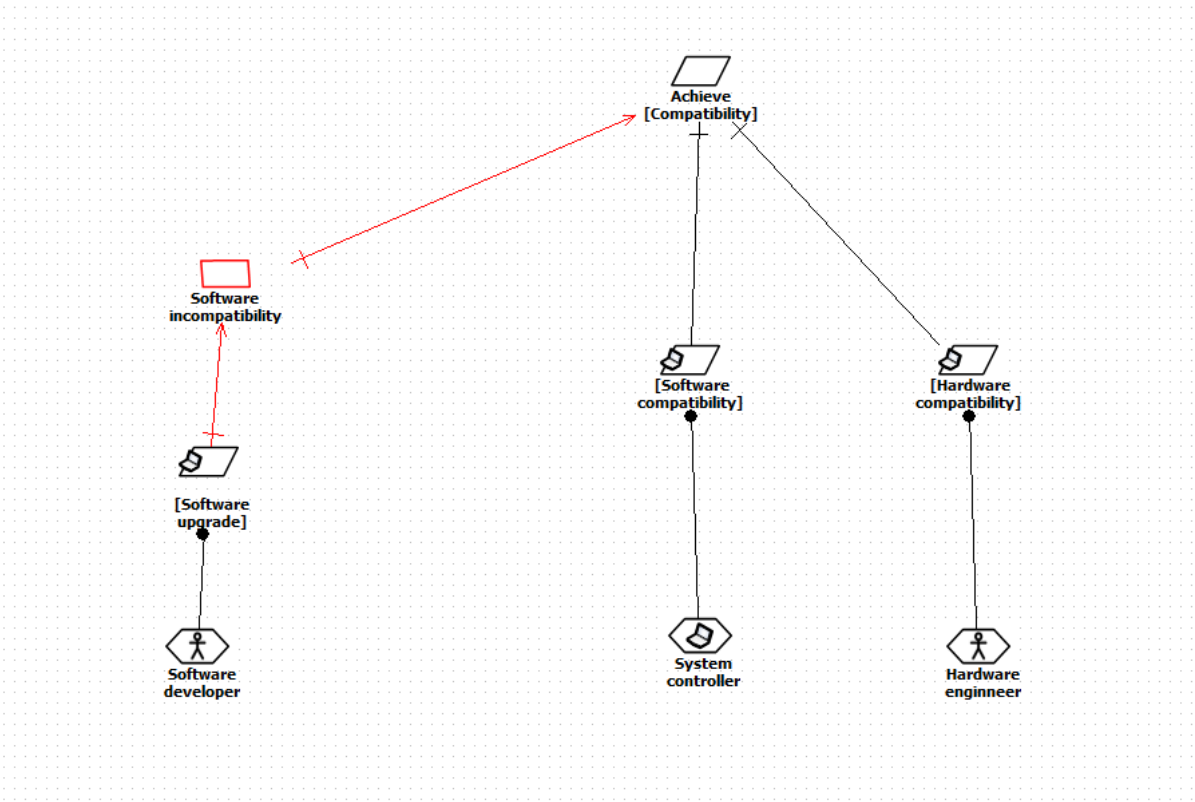
Security


Achieve
[Security]
Intrusion
attacks
[Information
encryption]
[System
prevention]
[System
detection]
Security
Controller
System
Controller

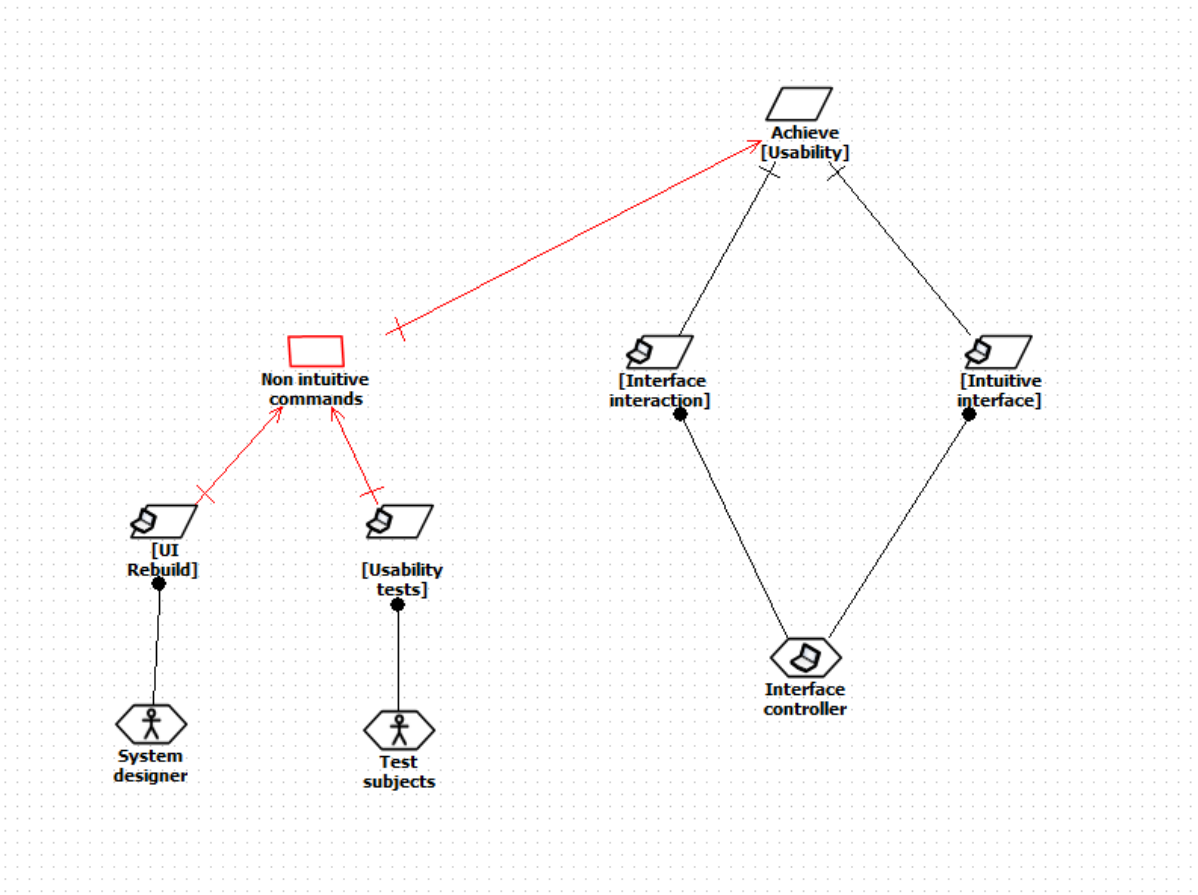
Data Integrity



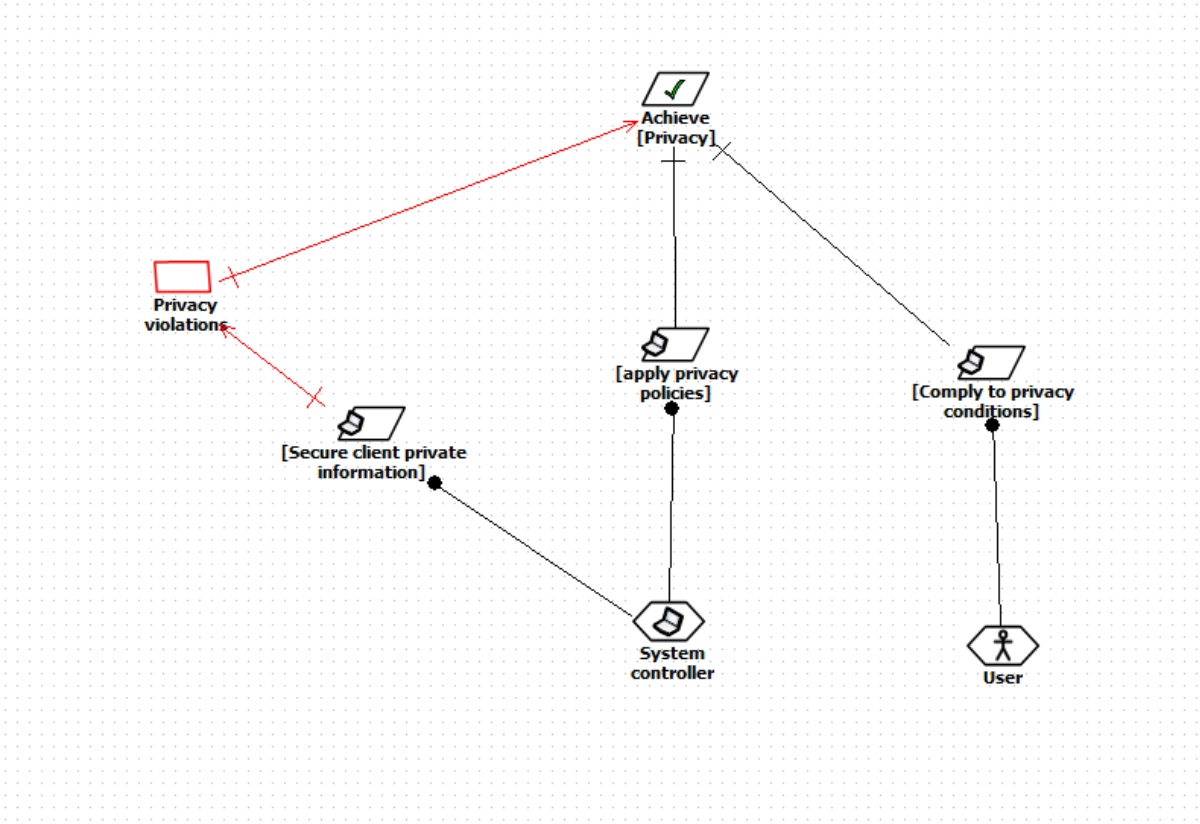
Compatibility



Usability


Achieve
[Usability]
Non intuitive
commands
[Interface
interaction]
[Intuitive
interface]
[UI
Rebuild]
[Usability
tests]
Interface
controller
System
designer
Test
subjects

Privacy


Achieve
[Privacy]
Privacy
violations
[apply privacy
policies]
[Comply to privacy
conditions]
[Secure client private
information]
System
controller
User

About Part 2

For the next phase we will implement a prototype with a focus on the following features (approved by the professor):

- Follow User
- Check if User is Following
- Send Message
- Make Post
- Delete Post
- Edit Profile