

PS3 Problem Analysis

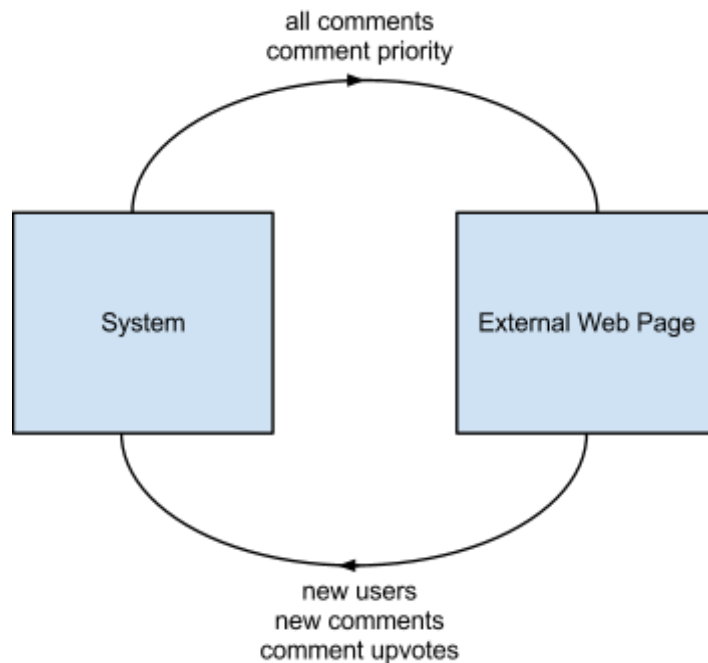
Phase 2 and Phase 3

Overview

Purpose and goals

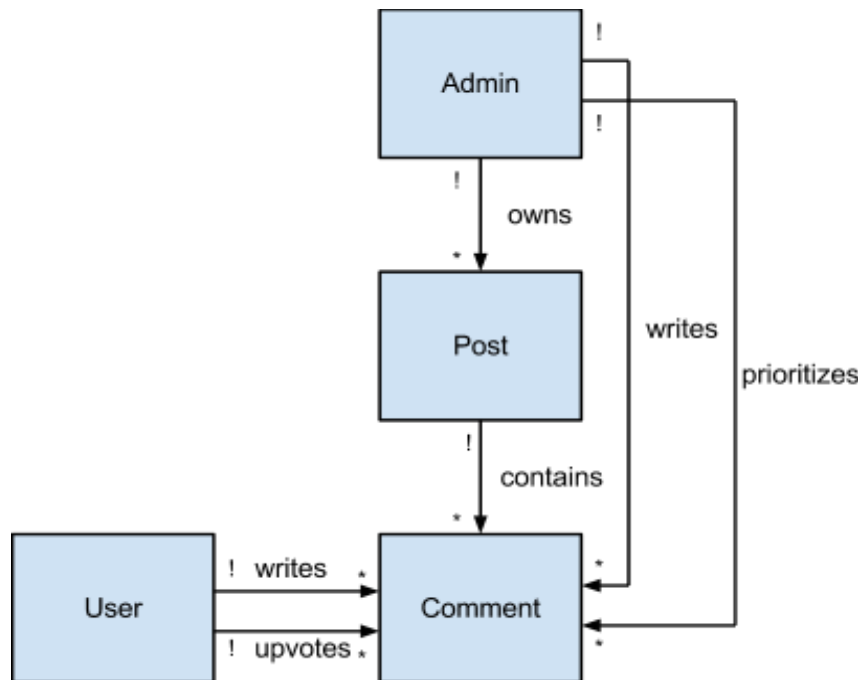
For both phase 2 and phase 3, the goals of the system are the same. I will be designing and implementing a service that allows for comments on admin specified web page components. Users will be able to see new comments in real time, post comments, and upvote comments. In phase 3, admins will be able to give certain comments priority over others. While existing solutions exist for this type of service, my system will be very simple and easy to use, with the focus being on upvoting and correctly prioritizing the ordering of comments.

Context diagram



Domain

Object model



Event model

Admin registration

User registration

Admin login

User login

Create a post: on the system web page, create a log for the web page you would like to embed the comment system within

Create a comment

Upvote a comment: only users can upvote comments on the external embedment

Prioritize a comment: only admins can prioritize a comment on the system web page

Events ::= Admin | User

Admin ::= AdminReg AdminLogin* CreatePost* (CreateComment | PrioritizeComment)*

User ::= UserReg* UserLogin* (CreateComment | UpvoteComment)*

Behavior

Feature descriptions

User registration

Admin registration

User login

Admin login

Create a new post for comments: an admin can register a post on their website and implement the comment service on that post

Create a comment: a user or admin can create a comment on an existing post

Upvote a comment: a user can upvote an existing comment

Prioritize a comment: an admin can prioritize an existing comment

Security concerns

The system must have a solid authentication system for logging in both admins and users. Passwords will be used for both logins, and sessions used to authenticate both as well. Another security concern is user spam. To address this, admins have the capability to prioritize comments, which implies both increasing the visibility or decreasing it in the event of comment spam.

Operations

User registration

pre: not logged in as a user or admin, on embedded site
post: new user created and logged in
frame: all fields filled out and valid

Admin registration

pre: not logged in as a user or admin
post: new admin created and logged in
frame: all fields filled out and valid

User login

pre: not logged in as user or admin, registered as user, on embedded site
post: logged in as user
frame: all fields filled out and valid

Admin login

pre: not logged in as user or admin, registered as admin
post: logged in as admin
frame: all fields filled out and valid

Create a post

pre: logged in as an admin
post: post created

Create a comment

pre: logged in as a user (on embedded site) or admin (on system site)
post: comment created

Upvote a comment

pre: logged in as a user, comment exists
post: comment upvoted by 1 increment

Prioritize a comment

pre: logged in as an admin, comment exists
post: comment added to priority list

User interface

login

welcome

Homepage

login

username:
password:

Login

login

welcome mari!

view posts

create post

Admin home

login

link to post

comment2*

comment0

Sample post: numbers represent upvotes and stars represent admin priority

post

comment 2 *

comment 0

write new comment here login

Embedded on web page: numbers represent upvotes and stars represent admin priority

Homepage leads to login leads to admin home which leads to sample post

Service embedded on web page allows for user login, commenting, and upvoting