

Project Document

Requirement Specification

Problem Statement

Piazza, the most popular Q&A platform for university courses, will require a subscription/license purchase. It is time for an open-source and free alternative!

Proposed Solution

Open-Piazza will be an open-source and free alternative to Piazza. Like Piazza, it will be a threaded discussion platform. Users can make posts using a content editor, allowing users to format text easily, type equations with LaTeX, write code, upload documents, images, etc. Instructors will have the ability to create tags to organize the discussion board (e.g., Lectures, Labs, Assignments, Exams). In addition, instructors will have the ability to create filters to help manage the discussion board (Unread, Pinned, Unanswered). Posts can be private and/or anonymous, and users can endorse questions and/or responses.

Open-Piazza provides Piazza's same features with some modifications, additions, and subtractions! For example, Open-Piazza will not have wiki-style answers. Instead, it will allow users to post responses and/or endorse answers (similar to StackOverflow/Reddit). Also, instead of folders, Open-Piazza uses tags/filters to organize posts.

Open-Piazza, similar to Piazza, will have two "post" types: questions and notes. Unlike Piazza, "polls" will not be a different post type. Instead, polls can be inlined in other post types. Open-Piazza will have an additional post type, "conversations," which is meant to be a Slack-like chatting feature. In Open-Piazza, a response to a post is called a "comment." A comment can be tagged as the answer to a question.

Open-Piazza, similar to Piazza, will have two user roles: Student and Staff. On Piazza, "staff" is called Professor/Teaching Assistant. On Open-Piazza, we will let "staff" rename their role (the display name for their position) to a term consistent with their role in their institution (e.g., professor vs. lecturer vs. instructor or teaching assistant vs. course assistant). Moreover, Open-Piazza will have an admin role (staff with more privileges). The creator of a "class" will become the admin by default. The admin can make any of the other staff "co-admin."

Piazza does not have an API, but it integrates with Learning Management Systems (LMS) through Learning Tools Interoperability (LTI) technology. On the other hand, Open-Piazza will have a well-documented API and an LTI wrapper around the API to integrate it with any LMS readily. The benefit of having an LMS integration is that users are automatically given access to the class with the appropriate user role. The staff doesn't need to update the class roster in Open-Piazza as it changes (some students add/drop the course). Additionally, through LMS integration, users will access Open-Piazza bypassing the login step. More to that last point, Open-Piazza's API server will enable institutions to decide and require a user authentication mode. For instance, users may be given the option to create a username/password and/or use a popular Single Sign On (SSO) such as Google/GitHub/LinkedIn or a university's SSO (which is usually a SAML based authentication).

The API will enable third-party integrations. Developers can use it to, e.g., build a plugin for editors/IDEs so students can post a question without the need to leave their coding environment. Instructors can connect the "comment" section of their course content website to their class on Open-Piazza so students would post questions as they read the content. Etc.

Potential Clients

- ★ Educational Institutes (in particular, Higher Ed).
- ★ Instructors, educators, anyone interested in free and open-source discussion boards and Q&A platforms.

Functional Requirements

P1 to P8 are priority levels (p1 highest priority). If a requirement will be available to a particular user role, the role is highlighted in square brackets.

Core requirements:

- Register (p1)
- Login (p1)
- Create Class (p1)
- Invite TAs/Co-Instructors [Admin] (p1)
- Create a signup link for students [Admin] (p1)
- Signup for a class (p1)
- Make announcement [Staff] (p1)
- Ask question (p1)
- Answer question (p1)
- Be able to edit/delete posts (questions/answers/etc) (p2)
- Be able to ask anonymously and/or post privately (p2)
- Reply/comment to follow-up/engage in discourse (p2)
- Search/sort/tag/group/pin/bookmark/cross-reference posts (p2)
- Rich text formatting, Latex equation, syntax highlighting, image insertion, document attachment, etc (p3)
- Endorse questions/answers (p3)
- Follow/unfollow a post (p3)
- Customize class settings (e.g. disallow anonymous posts) [Admin] (p3)
- Customize app settings (e.g., notification, theme, etc) (p3)
- Get reports/stats on class participation, etc. [Admin] (p4)
- Customize account/profile (e.g., change password, display name, etc) (p4)

Other requirements:

- Create a poll (within a post) [Staff] (p5)
- Participate in a poll (p5)
- Create a "conversation" (chat) (p5)
- Partake in a "conversation" (chat) (p5)
- @mention to notify users (p5)
- More features on the content editor (e.g., WYSIWYG, emoji, magic imports, etc.) (p6)
- Create templates to pre-define what a student should include in their post [Admin] (p6)
- Save commonly used replies and reuse them [Admin] (p6)
- More ways to search/sort/filter posts (and extend it to comments of posts) (p6)

- More Admin-level control to, e.g., see deleted posts, history of changes, allow/disallow self-sign up, temporarily inactive the class, etc. [Admin] (p7)
- More statistics/reports (e.g. views per post, custom exports, etc) [Admin] (p7)
- More customization settings for the app (e.g., themes, set time to turn notification off, etc.) (p7)
- More customization for account/profile (e.g. avatar/profile picture, display name, pronouns, etc.) (p7)
- LMS integration, options for sign-up/sign-in (e.g. Social media/University SSO) (p8)
- Follow-up using emails (similar to customer-support tickets) (p8)
- Mark similar question (like linking issues in GitHub)

Non-functional Requirement

- Availability:
 - ◆ Open-source and free.
 - ◆ Easy to set up (and cheap to host/maintain).
- Maintainability/Scalability:
 - ◆ Clean code, modular design (at multiple levels of abstractions).
 - ◆ Separation between the client (frontend) and the server (API).
 - ◆ Technology stack that is performant, scalable, reliable, and popular (thus easy to learn and use).
- Usability:
 - ◆ Modern, responsive, mobile-first UI/UX.
 - ◆ Easy to use (feels familiar; a user can start efficiently working with the UI right away without training).
- Security:
 - ◆ Protection against unauthorized access.
 - ◆ User holds ownership of data and is in complete control of it.
 - ◆ Data backup/export.
 - ◆ Security practices to protect against malware/bad actor attacks (HTTPS, sanitization, etc.)
- Portability/Compatibility:
 - ◆ Works with all major browsers.
 - ◆ Multi-platform frontend application.
 - ◆ Integration with LMS through LTI.
 - ◆ Support for SAML-based SSO.

Software Architecture & Technology Stack

Open-Piazza will adhere to the client-server software architecture.

The server will provide a public and well-documented API. The idea is that universities (or instructors) will deploy and serve the API server on their own IT infrastructure. This way, the university owns the data and pays the cost of keeping the API server up and running (scale it when needed). The server will be built using NodeJS + ExpressJS + MongoDB.

The client will consist of a responsive mobile-first web application. The idea is that a user will connect the web app to their university (course) API by providing the API base-URL. The responsive mobile-first design will enable wrapping the web app inside a web-view to create cross-platform mobile/desktop applications. Piazza's rusty user interface certainly needs a

makeover. Open-Piazza will look and feel like modern software applications. The client will be built using [Ionic and React](#).

This is essentially the MERN stack. Refer to [Why is MERN stack our preferred platform for Startups apps?](#).

Similar Existing Apps

- Communication platforms for education
 - <https://piazza.com>
 - <https://campuswire.com>
 - <https://edstem.org>
 - <https://aula.education>
 - <https://counselore.org>
- LMS solution with discussion board
 - <https://moodle.org>
 - <https://canvaslms.com>
 - <https://d2l.com/products/>
 - <https://acadly.com/>
- Open-source forum platforms
 - <https://discourse.org>
 - <http://mybb.com/>
 - <https://phpbb.com/>
 - <http://openatrium.com/>
 - <http://osqa.net/>
- Team communication platforms
 - <https://slack.com>
 - <https://twist.com/>
 - <https://zulip.com/>
 - <https://rocket.chat/>
 - <https://mattermost.com/>

User Stories

Must-have

Integration

- As a user, I want to connect the Open-Piazza app to the API server of my university by providing a base URL to access the discussion board for courses offered by my university.

Create/Read/Update/Delete Account

- As a user, I want to create an account by providing an email and password to access and use the Open-Piazza platform.
- As a user, I want to change my password and/or account/personal information to update my account when needed.
- As a user, I want to delete my account to leave the platform when I want to.
- As a user, I like to change my display name to a nickname so that others would @mention me with my nickname.
- As a staff, I like my user role to be displayed next to my display name so that others know I'm not a student.
- As a staff, I like to change the name of my role to rename it to, e.g., what is commonly used in my institution.

Create/Read/Update/Delete Class

- As an instructor (or a staff designated by an instructor/department), I want to create a "class" with my course number and name (and optionally adding academic term and/or class section) to keep class communications separate for each course/class that I'm teaching.
- As a user, when I create a class, I like to be given admin privileges to manage my class.
- As an admin, I want to be able to edit the information about a class I've created so that I can, e.g., correct any inadvertent mistakes made in the process of class creation.
- As an admin, I want to delete a course and all data associated with it to truly be the owner of the data related to my class.
- As a user, I like to easily switch between classes I use Open-Piazza for to access class discussion seamlessly.
- As a professor, I want to invite students, TAs, and co-instructors using their email to join the class I've created.

Manage Class

- As an admin, I want to set whether students can show up as "Anonymous" to both classmates (students) and instructors (staff) or only to classmates but not to instructors to have control over the anonymity level.
- As an admin, I want to set whether students will post privately to instructors (staff) or only instructors can post privately to each other to control the utility of private posts.
- As an admin, I want to define a set of tags to organize the posts. The tags are a replacement for Piazza's folders. Tags cannot be nested (although Piazza allows subfolders), but a post can have multiple tags.

- As an admin, I want to require any user to select at least one tag for a post they make to filter all posts using tags.
- As an admin, I like to change a class's status to "inactive" to freeze the course, preventing anyone from joining and submitting new posts. This is useful when the term is over.

Create/Read/Update/Delete Post

- As a user, I like to make a post, ask a question, or create an announcement.
- As a student making a post, I like to make it anonymously so peer pressure would not prevent me from asking questions.
- As a user making a post, I like to make it private to staff or a particular group, so only those users see my post.
- As a student, I like to edit a post I made when, e.g., I made a mistake when I initially posted it.
- As an admin, I like to edit/delete any posts to control posts made in my class.
- As a student, I like to delete a post I made when, e.g., I find the question was asked and answered before.
- As a user making a post, I like to add a title and select tags to assist others in quickly finding my post.
- As a user, I expect support for text formatting so that posts can be written and viewed in a rich format.
- As a user making a post, I like to write it in markdown to format my post without using the WYSIWYG editor.
- As a user making a post, I like the editor to support Latex in writing mathematical expressions.
- As a user making a post, I like the editor to support code formatting and syntax highlighting to format code snippets.
- As a user making a post, I like to preview my post before posting it to ensure the formatting appears as I intended it.
- As a user making a post, I like the editor to support the insertion of images/video to provide rich content supporting my note/question.
- As a user making a post, I like to insert images in my post by simply copying and pasting the image so that I don't have to save a screenshot as a file, upload it, and then link it in the post.

Create/Read/Update/Delete Comment

- As a user, I like to leave a comment on an announcement to follow up, e.g., with a question regarding the announcement.
- As a user, I like to leave a comment on an answer to a question to follow up, e.g., with a clarifying question regarding the answer.
- As a user, I like to answer questions to help others through their problems.
- As a staff, I like to endorse a question to encourage asking good questions.
- As a staff, I like to endorse an answer to let students know the answer can be trusted.
- As a student, I like to endorse a question to indicate I had the same question or that it helped my understanding of the material.
- As a student, I like to endorse an answer to let other users know that I have found it useful.
- As a student, I like the software to highlight when the staff endorses an answer vs. endorsement by other students to know which answer should be trusted.

- As a user who asked the question, I like to endorse an answer to let staff know that my problem is resolved.
- As a user who asked the question, I like to flag my post as unresolved to let staff know that the answers have not resolved my problem.
- As a user, I like to remove an endorsement I have given to, e.g., endorse a better answer instead.
- As a user, I like to edit my comment/answer/follow-up to, e.g., correct a typo in my initial remark.
- As a user, I like to delete my comment/answer/follow-up to, e.g., remove my initial commentary.

Statistics/Reports

- As a user creating a class, I like to add an estimate of my class size and have the software present the number of users signed up so far to quickly gain insight into what percentage of the students already signed up.
- As an admin, I like the software to track staff and student participation and present this data visually to gain insight into class activity.
- As an admin, I like to easily export participation data to process this data for, e.g., pedagogical purposes.

Link/Cross-reference

- As a user, I like to bookmark a post to access it readily.
- As a user writing a post/comment, I want to link to another post to cross-reference between threads easily.

Search/Sort/Filter/Group

- As a user, I want to sort the posts in chronological order to see the most/least recent posts.
- As a user, I want to search for posts by providing keywords or phrases that may have been used in the title or description (body) of a post/comment to quickly find the ones relevant to my query.
- As a user, I like to filter the posts based on a tag (or multiple tags) to easily find, e.g., all posts related to a particular topic/homework.
- As a user, I like to filter the posts to show only "unread" ones to easily find and read the posts I've not read yet.
- As a user, I like to filter the posts to show only "unresolved" ones to easily find and answer the posts due for an answer.
- As a user, I like to filter the announcements (made by staff) to easily find them among the clutter of posts made by all users.
- As an admin, I like to pin/unpin a post to help students quickly find posts with important/relevant content.

Notification

- As a user, I like to receive a notification when a class announcement is made to avoid missing important information.

- As a user, I like to receive a notification when an update is made to a post I'm following so as not to miss any updates. An answer to a question user asks is considered an update to a post they follow.
- As a user, I like to follow a post to be notified when an update is made to it. By default, I want to follow a post if I posted it or replied to it.
- As a user, I like to unfollow a post and not be notified when an update is made.

Nice-to-have

Integration

- As a user trying to connect the web/mobile app to my university's API server, I want this process to be as easy as scanning a QR code so that I don't have to type in a long URL.
- As an IT support staff setting up the backend of Open-Piazza at our institution, I like to connect Open-Piazza to the university's learning management system to automatically give access to the staff/students with an appropriate user role.
- As a student, I like to access Open-Piazza through LMS integration to bypass the login step and directly access the application.
- As an IT support staff setting up the backend of Open-Piazza at our institution, I like the process to be as simple as running a Docker image to set it up with minimal effort.

Create/Read/Update/Delete Account

- As a user, I want to use my Google/GitHub/LinkedIn accounts to log into Open-Piazza and not create and remember a new username and password to use Open-Piazza.
- As a user, I want to use my institution's SSO to log into Open-Piazza and not create and remember a new username and password to use Open-Piazza.
- As a user, I like to upload a profile picture to customize my avatar.
- As a user, I like to provide my pronouns and optionally display them next to my display name so others may refer to me by "my" pronouns.
- As an IT support staff setting up the backend of Open-Piazza at our institution, I like to limit users' access to only use the institution SSO to access the application to control who accesses the application.

Create/Read/Update/Delete Class

- As an IT support staff setting up the backend of Open-Piazza at our institution, I like to set it so that only a verified faculty/staff can create a class to prevent students from creating a "class" for a course we offer at our institution.
- As an admin, when it comes to inviting users, I want to provide their emails as a CSV file to not have to enter their emails one by one.
- As an admin, I want to optionally allow users to self signup for a class I've created using a signup link so that I don't have to invite them to it.
- As an admin, I want to set an access code and/or expiration date for a signup link to a course I've created to have an additional level of control over the signup process.
- As an admin, I want to create different signup links (with expiration date) and/or set different access codes to streamline the signup process to onboard different kinds of users (co-instructors, TA, students).
- As a user trying to signup for my class, I want this process to be as easy as scanning a QR code so that I don't have to type in a long URL and/or access code.

Manage Class

- As an admin, I like to be able to temporarily change the status of a class to "inactive" and/or schedule it to switch between inactive and active during a set period of time to prevent anyone from making any new posts during, e.g., take-home exams.
- As an admin, I like to set "Private Posts" as "Default" or "Only Allow Private Posts" so to prevent anyone from making any public posts during, e.g., take-home exams.
- As an admin, I like to save course settings as a template to reuse them for other classes and/or future cohorts of the same class.
- As an admin, I like to allow all users to @mention other users or restrict this to the staff to control which user groups can use the @mention feature.
- As an admin, I like to create a timetable and assign my staff to monitor the discussion board to better manage the workload between my staff.
- As an admin, I like to create user groups to manage multiple sections better or communicate with project teams.
- As an admin, I like to allow/disallow whether students can post to a targeted group or only staff can do this to ensure this feature is not misused or abused.
- As an admin, I like to allow/disallow users to leave the class on their own to stay on top of who adds/drops the course.
- As an admin, I like to allow/disallow students to make an announcement or start a conversation (create a chatroom) to limit them only to post questions if needed/desired.

Create/Read/Update/Delete Post

- As a user, I like to make a post to start a conversation (chatroom).
- As an instructor, I like to create post templates to pre-define what a student should include in their post.
- As a user making a post, I like to use a WYSIWYG editor to format my post easily.
- As a professor, I like to add a poll to my post to survey students and easily collect their responses.
- As a user, I like to use email to make a post (send an email to the class mailing address), so I don't have to go to a different platform to make a post.
- As a user, I like to reply to email notifications to follow up on a post/thread that I've created, so I don't have to go to the Open-Piazza platform for follow-ups.
- As a user, I like to make a post to a specific group to spare others from viewing a post unrelated to them. This could be useful for communicating with a particular section of the course, e.g., communicating within a project team.
- As an admin, I like to access posts deleted by students, so I have a complete record of all posts made in my class.
- As an admin, I like to see any post's history and how it changed/evolved.
- As a user wanting to ask a question, I like to be presented with "similar" questions before posting mine to not ask a question that was asked before.
- As an admin, I like to help students catch up if they haven't been keeping up-to-date on posts by flagging posts as part of their Reading List. Optionally, I want to set an additional flag that requires students to read the post before creating a new one. Reading List posts should appear in a student's "my reading list" bin for easy access, right below the "pinned" bin.
- As a user inserting an image in my post, I like Open-Piazza to provide an interface to annotate the image, so I don't have to annotate it using another tool before insertion.

Create/Read/Update/Delete Comment

- As an admin, I like to set a count-down timer on posts to allow staff to hold off on answering student questions immediately, thereby encouraging other students to answer questions in the meanwhile.
- As a staff, I like to save commonly used replies and reuse them. This is helpful when offering recurring feedback on student posts.
- As an admin, I like to delete/edit any comment/answer/follow-up on posts to remove inappropriate content.
- As a user, I like to partake in a conversation to be a part of a discourse that I can contribute to.
- As a user, I like to participate in a poll (embedded in a post) to, e.g., vote and/or voice my opinion.
- As a user, I like to pin a post in a conversation thread so important messages don't disappear in the clutter of messages.

Statistics/Reports

- As an admin, I like to have statistics about the number of unique views for each post and a list of every user who has viewed a post to track and refer to these if/when needed.

Link/Cross-reference

- As a user, I like to quickly quote a portion of a post in my answer/comment/follow-up to not have to retype or copy and paste it.
- As a user, I like to bookmark an answer/follow-up to a post to access it later readily.
- As a user writing a post/comment, I like to link to another comment (sub-thread) to cross-reference between threads easily.
- As a user, I like to be able to @mention any of the users to bring their attention to a post.

Search/Sort/Filter/Group

- As a user, I want to group posts by date (day, week, month, or a range search) to review, for instance, all the posts when I was not active on the discussion board.
- As a user, I like to filter the posts to show only "updated" ones to easily find and read the posts that have been updated since I last read them.
- As a user, I like to filter the posts made by a user to easily find a post made by a particular user without going over all posts.
- As a user, I like to filter the posts made by me to easily find such a post without going over all posts.
- As a user, I like to filter the posts to those I follow to find them without going over all posts.

Notification

- As a user, I like to have options as to how the app notifies me (e.g., email vs. push notification) and what should trigger a notification (e.g., only for announcement vs. for all events that trigger notification) so I have more control over how I use the Open-Piazza app.
- As a user, I like to set times to turn notifications on/off to not be disturbed when I am doing deep-focused work unrelated to the Open-Piazza class.

- As a user, I like to use Open-Piazza natively on mobile or desktop so that I don't have to open the app in the browser.
- As a user, I like to receive a notification when I was @mentioned in a thread to read and reply to it in a timely fashion.

Roadmap

The first seven iterations focus on "must-have" requirements. The user stories are divided into iterations based on priority (the value they contribute) and effort estimate. By the end of iteration-7, we will launch the alpha release. It is advisable to get user feedback before implementing "nice-to-have" features.

Iteration-1

1. As a user, I want to connect the Open-Piazza app to the API server of my university by providing a base URL to access the discussion board for courses offered by my university.
2. As a user, I want to create an account by providing an email and password to access and use the Open-Piazza platform.
3. As an instructor (or a staff designated by an instructor/department), I want to create a "class" with my course number and name (and optionally adding academic term and/or class section) to keep class communications separate for each course/class that I'm teaching.
4. As a professor, I want to invite students, TAs, and co-instructors using their email to join the class I've created.
5. As a user, I like to make a post, ask a question, or create an announcement.
6. As a user, I like to answer questions to help others through their problems.
7. As a student, I like to edit a post I made when, e.g., I made a mistake when I initially posted it.
8. As a user, I like to edit my comment/answer/follow-up to, e.g., correct a typo in my initial remark.

Iteration-2

1. As a student, I like to delete a post I made when, e.g., I find the question was asked and answered before.
2. As a user, I like to delete my comment/answer/follow-up to, e.g., remove my initial commentary.
3. As a student making a post, I like to make it anonymously so peer pressure would not prevent me from asking questions.
4. As a user making a post, I like to make it private to staff or a particular group, so only those users see my post.
5. As a user, I like to leave a comment on an announcement to follow up, e.g., with a question regarding the announcement.
6. As a user, I like to leave a comment on an answer to a question to follow up, e.g., with a clarifying question regarding the answer.
7. As a user making a post, I like to add a title and select tags to assist others in quickly finding my post.
8. As an admin, I want to define a set of tags to organize the posts. The tags are a replacement for Piazza's folders. Tags cannot be nested (although Piazza allows subfolders), but a post can have multiple tags.

Iteration-3

1. As a user, I want to search for posts by providing keywords or phrases that may have been used in the title or description (body) of a post/comment to quickly find the ones relevant to my query.
2. As a user, I like to filter the posts based on a tag (or multiple tags) to easily find, e.g., all posts related to a particular topic/homework.
3. As a user, I like to filter the announcements (made by staff) to easily find them among the clutter of posts made by all users.
4. As an admin, I like to pin/unpin a post to help students quickly find posts with important/relevant content.
5. As a user, I like to filter the posts to show only "unread" ones to easily find and read the posts I've not read yet.
6. As a user, I like to filter the posts to show only "unresolved" ones to easily find and answer the posts due for an answer.
7. As a user, I want to sort the posts in chronological order to see the most/least recent posts first.
8. As a user, I like to bookmark a post to access it readily.
9. As a user writing a post/comment, I want to link to another post to cross-reference between threads easily.

Iteration-4

1. As a user, I expect support for text formatting so that posts can be written and viewed in a rich format.
2. As a user making a post, I like to write it in markdown to format my post without using the WYSIWYG editor.
3. As a user making a post, I like the editor to support Latex in writing mathematical expressions.
4. As a user making a post, I like the editor to support code formatting and syntax highlighting to format code snippets.
5. As a user making a post, I like to preview my post before posting it to ensure the formatting appears as I intended it.
6. As a user making a post, I like the editor to support the insertion of images/video to provide rich content supporting my note/question.
7. As a user making a post, I like to insert images in my post by simply copying and pasting the image so that I don't have to save a screenshot as a file, upload it, and then link it in the post.

Iteration-5

1. As a staff, I like to endorse a question to encourage asking good questions.
2. As a staff, I like to endorse an answer to let students know the answer can be trusted.
3. As a student, I like to endorse a question to indicate I had the same question or that it helped my understanding of the material.
4. As a student, I like to endorse an answer to let other users know that I have found it useful.
5. As a student, I like the software to highlight when the staff endorses an answer vs. endorsement by other students to know which answer should be trusted.
6. As a user who asked the question, I like to endorse an answer to let staff know that my problem is resolved.
7. As a user who asked the question, I like to flag my post as unresolved to let staff know that the answers have not resolved my problem.

8. As a user, I like to remove an endorsement I have given to, e.g., endorse a better answer instead.
9. As a user, I like to follow a post to be notified when an update is made to it. By default, I want to follow a post if I posted it or replied to it.
10. As a user, I like to unfollow a post to not be notified when an update is made.
11. As a user, I like to receive a notification when a class announcement is made to avoid missing important information.
12. As a user, I like to receive a notification when an update is made to a post I'm following to avoid missing any updates. An answer to a question user asks is considered an update to a post they follow.

Iteration-6

1. As a user, when I create a class, I like to be given admin privileges to manage my class.
2. As an admin, I want to be able to edit the information about a class I've created so that I can, e.g., correct any inadvertent mistakes made in the process of class creation.
3. As an admin, I want to delete a course and all data associated with it to truly be the owner of the data related to my class.
4. As a user, I like to easily switch between classes I use Open-Piazza for to access class discussion seamlessly.
5. As an admin, I like to edit/delete any posts to control posts made in my class.
6. As an admin, I want to require any user to select at least one tag for a post they make to filter all posts using tags.
7. As an admin, I want to set whether students can show up as "Anonymous" to both classmates (students) and instructors (staff) or only to classmates but not to instructors to have control over the anonymity level.
8. As an admin, I want to set whether students will post privately to instructors (staff) or only instructors can post privately to each other to control the utility of private posts.
9. As an admin, I like to change a class's status to "inactive" to freeze the course, preventing anyone from joining and submitting new posts. This is useful when the term is over.

Iteration-7

1. As a user creating a class, I like to add an estimate of my class size and have the software present the number of users signed up so far to quickly gain insight into what percentage of the students already signed up.
2. As an admin, I like the software to track staff and student participation and present this data visually to gain insight into class activity.
3. As an admin, I like to easily export participation data to process this data for, e.g., pedagogical purposes.
4. As a user, I want to change my password and/or account/personal information to update my account when needed.
5. As a user, I want to delete my account to leave the platform when I want to.
6. As a user, I like to change my display name to a nickname so that others would @mention me with my nickname.
7. As a staff, I like my user role to be displayed next to my display name so that others know I'm not a student.
8. As a staff, I like to change the name of my role to rename it to, e.g., what is commonly used in my institution.