

BoilerScout Product Backlog

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Problem Statement:

It's difficult for Purdue students in the STEM field to meet each other, whether they're looking for peers in the same classes or another student with a particular skill set or experience. With BoilerScout, we aim to combine search, communication, and forum features that different services offer and curate them to Purdue students' needs. This will make collaboration among students easy, whether it be for school work or side projects.

Background Information

Audience

Our platform will be mainly targeting Purdue students, especially in the STEM field. Many Purdue students seek to find students to work with on side projects, get help on school work, or ask for advice. Projects often require a broader skill set, which is why students need to find others to collaborate with. With BoilerScout, we aim to tackle the challenge of Purdue students meeting and collaborating with each other.

Similar Platforms

There are some similar services in existence, such as LinkedIn, Piazza and the Purdue directory. LinkedIn that allow people to search and find others based on professional criterias. Another similar platform is Piazza, where students sign up for forums for classes they are in. The online Purdue directory allows faculty and students to search each other using a name or email.

Limitations

While these platforms are widely used, they don't carry features that promote collaboration among peers. For example, LinkedIn is made specifically for career advancement and doesn't really consider coursework experience. LinkedIn also requires users to pay money once a monthly use quota is reached. Piazza doesn't have a profile feature viewable by other students, and does not support search or communication amongst students. The Purdue directory allows you to search students by name but only provide a person's email and the college they are under.

Functional Requirements

- 1) As a developer, I would like to have sessions handled via cookie based authentication, so that users cannot bypass sections of our application randomly.
- 2) As a developer, I would like to use a secure hash for a user's credentials, so that the risk of having information stolen is lower.
- 3) As a developer, I would like to verify accounts through a user's Purdue email, so that I know that he or she is a Purdue student.
- 4) As a user I would like to sign up with a unique username and password, so that I can have a set of credentials to use the application.
- 5) As a user, I would like to login with the username and password that I created, so that I can access and use the application.
- 6) As a user, I would like to be able to retrieve my username if I forget it, so that I can keep my account and information in case of such an event.
- 7) As a user, I would like to be able to retrieve my password if I forget it, so that I don't get locked out of my own account.
- 8) As a user, I would like to be able to resend the confirmation e-mail, so that I can verify my account in case the email is lost.
- 9) As a user, I would like to create a profile that contains a short biography and my personal skills, so that other user's can see if I meet their needs.
- 10) As a user, I would like to be able update my profile with new information and skills, so that my relevant classes and skills are as recent as possible.
- 11) As a user, I would like to search for other profiles using specific filters, so that my search automatically returns all results matching my filter.
- 12) As a user, I would like to search for specific skills, names, or keywords and have a list of users that match be returned, so I can make my search as narrow or as wide as I want.
- 13) As a user, I would like to be able to click on a user's email address and draft a message, so that I can contact them.
- 14) As a user, I would like to view a forum containing different posts from other users, so that I can see other questions that Purdue students have posted.
- 15) As a user, I would like to search through the forum with keywords and tags, so I can look for posts that are relevant to me.
- 16) As a user, I would like to make posts on the forum, so that I can ask questions or post issues I have that other Purdue students may be able to help me with.
- 17) As a user, I would like to be able to save certain forums for quick access. (if time permits)
- 18) As a user, I would like to comment on other people's posts, so that I can provide my expertise in an area if it calls for it.
- 19) As a user, I would like to privately message other users, so that I can further connect with peers in order to receive help or mentorship (if time permits).
- 20) As a user, I would like to receive and view private messages in an inbox, so that I can keep track of all of my current correspondences with other users. (if time permits)

Non-Functional Requirements

- 21) As a developer, I would like to design a well thought out relational database schema to store and interact with our data
- 22) As a user, I would like to be able to use this application on a web browser, so that I can conveniently access to it from anywhere .
- 23) As a user, I would like the interface to be easy to use and not require a lot of steps to do something, so that even if I lack computer expertise I can use it with ease.
- 24) As a user, I would like the application to search and show me the results in a relatively short time, so that it isn't tedious to run many searches one after the other.
- 25) As a user, I want my information to stay secure.
- 26) Only Purdue students should be able to sign up.
- 27) Information such as passwords must be hashed (MD-5 or SHA-x).
- 28) Sessions are handled with cookie based authentication.
- 29) A thorough API that can interface will all aspects of our MySQL database.
- 30) Version control must be well organized with proper branch management.
- 31) Twice a week stand up meetings to ensure clear and effective communication.