CmpE 352 Spring 2020 Group 6 – Milestone 1

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# **1. Executive Summary**

## **1.1 Summary of Project Status**

## **1.2 Planned for Moving Forward**

# **2. List and status of deliverables**

# **3. Evaluation of the status of deliverables and its impact on your project plan**

# **4. Evaluation of tools and processes you have used to manage your team Project**

# **5. Summary of work done**

|  |  |
| --- | --- |
| Group Member | Contribution |
| Ahmet Berat Can |  |
| Doğukan Kalkan |  |
| Emilcan Arıcan |  |
| Muhammed Enes Toptaş |  |
| Ezgi Gülperi Er |  |
| Tuba Çibuk |  |
| Hamza Işıktaş |  |
| Hazer Babur |  |
| Ömer Faruk Özdemir |  |
| Salih Can Özçelik |  |
| Cemre Efe Karakaş |  |

# **6. Communication plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Where** | **Purpose** | **Frequency** | **Audience** | **Channel** |
| Slack | Keeping each other informed about progress | Anytime | All members | Online |
| Github | Following Overall Work / Issue Management | Every Thursday @ 12 PM | All members | Face-to-face |
| Bogazici University, Cmpe Building, BM A5 | Weekly Review | Every Thursday @ 12 PM | All members | Face-to-face |
| Bogazici University, Cmpe Building, BM Classes | Customer Meeting | When Needed | Some members | Face-to-face |
| Whatsapp | Urgent Communication | Anytime | All members | Online |
| Piazza | Communication With The Customer | Anytime | All members | Online |

# **7 . Requirements**

# Glossary

* **1. User:** A person capable of contributing to or collaborating with others Projects/Papers, and has their own profile page. Authentication is required. There are 2 types of users, personal and corporal(institutional).
* **2. Collaborator:** A user that participates a project/paper.
* **3. Profile Page:** Page that users shall be able to share information about themselves.
* **4. Events:** The news about upcoming conferences, meetings and important dates.
* **5. Guest:** The user who is able to view Projects/Papers and see people's profile pages. No Authentication is required.
* **6. Profile:** A visual display of personal data associated with a specific user.
* **7. Search:** Find semantically similar users and Projects/Papers on the context information provided in the semantic tags.
* **8. Password:** Consists of at least six characters (the more the merrier) that are a combination of letters and numbers.
* **9. Projects:** Long-term works that involve milestones, business packages, deadlines.
* **10. Papers:** Short-term works that contain original research results or review existing results or show a totally new invention.
* **11. Basic Search:** Only text matching based search.
* **12. Tag:** Small labels that indicates related aspects of an project/paper.
* **13. Report System:** System that allows users to report problematic cases.
* **14. Notification:** Message that informs the user about a specific event.
* **15. Recommendation System:** System that recommends contents, papers, and project that user might interested in.
* **16. Conference:** An event where researchers in a field meet, present and discuss their researches.
* **17. Student:** Users that continues their education.
* **18. Academician:** Users that are not student.

# **Project Requirements**

## **1. Functional Requirements**

### ****1.1 User Requirements****

* + **1.1.1** Users shall be able to search and view users, public papers and projects
  + **1.1.2** Users shall be able to view profile pages of authors, and collaborators of papers and projects
  + **1.1.3** Users shall be able to search related information about the upcoming conferences or journal special issues

#### **1.1.4 Guests**

* + - **1.1.4.1** Guests shall not be able to view private papers or projects.
    - **1.1.4.2** Guests shall not be able to join papers/projects, comment to papers/projects or post new papers/projects.

#### **1.1.5 Registration**

* + - **1.1.5.1** Users shall be able to register by providing name, surname, unique email address and password
    - **1.1.5.2** Users shall validate the e-mail address for completing the registration phase
    - **1.1.5.3** Users shall be able to specify the research interests
    - **1.1.5.4** Users shall provide the information about affiliation
    - **1.1.5.5** Users shall be able to identify themselves as student or academician

#### **1.1.6 Registered Users**

* + - **1.1.6.1** Users shall login by email and password provided
    - **1.1.6.2** Users shall be able to state whether s/he is looking for a project to collaborate
    - **1.1.6.3** Users shall be able to send request to join the team
    - **1.1.6.4** Users, as the owner of the projects, shall be able to accept or reject requests to join the team
    - **1.1.6.5** Users shall be able to invite any user to participate
    - **1.1.6.6** Users shall be able to accept or reject invitations
    - **1.1.6.7** Users shall be able to rate and comment other users that s/he collaborated with during the collaboration and after the project is completed
    - **1.1.6.8** Users shall be able to collaborate on more than one paper/project
    - **1.1.6.9** User shall be able to disable join requests to end call for collaboration phase
    - **1.1.6.10** Users shall be able to have more than one paper/project topic posted
    - **1.1.6.11** Users shall be able to specify a deadline for the paper/project
    - **1.1.6.12** Users shall not be able to delete a paper/project that is in progress
    - **1.1.6.13** Users shall be able to file complaints
      * **1.1.6.13.1** Users shall be able to report another user, a project or a paper for unwanted/inappropriate behavior
      * **1.1.6.13.2** Users shall be able to mark a publication as unrelated
    - **1.1.6.14** Users shall be able to follow other users on the platform.
      * **1.1.6.14.1** Users shall be able to approve/reject follow requests.
      * **1.1.6.14.2** Users shall be able to set visibility of their projects/papers for the users not following them.
      * **1.1.6.14.3** Users shall be able to request to join a project/paper if they can see it.
      * **1.1.6.14.4** Users shall be able to invite other uses to collaborate, without following them.
    - **1.1.6.15** Users shall be able to set their profiles to public or private.
    - **1.1.6.16** Users shall be able to log out from his account.
    - **1.1.6.17** Users shall be able to delete his account.
    - **1.1.6.18** Users shall be able to delete or update a comment s/he made before.
    - **1.1.6.19** Users shall be able to delete or update a rate s/he gave before.
    - **1.1.6.20** Users shall be able to add additional files to the collaborated projects/papers.
    - **1.1.6.21** Users shall be able to add additional files to their projects/papers in progress.

#### **1.1.7 Registered Users Requirements**

#### **1.1.7.1 Profile Page**

* + - * **1.1.7.1.1** Users shall be able to provide information about the research area, recent publications and affiliation.
      * **1.1.7.1.2** Users shall be able to link their Google Scholar or ResearchGate accounts.
      * **1.1.7.1.3** Users shall be able to edit their own profile page.
      * **1.1.7.1.4** Users shall be able to see invitations that are sent from the other users.
      * **1.1.7.1.5** Users shall be able to see messages that are sent from the other users.
      * **1.1.7.1.6** Users shall be able to see ratings and comments that are made by other users.
      * **1.1.7.1.7** Users shall be able to see their followers.
      * **1.1.7.1.8** Users shall be able to see people who they follow.

#### **1.1.7.2 Creating / Editing Page**

* + - * **1.1.7.2.1** Users shall be able to provide information about: topic of the research, deadline of submission, milestones, codes, documents, result plots / figures, required skills in order to apply and if the the project is funded or not.
      * **1.1.7.2.2** Users shall be able to add a summary(abstract) part.
      * **1.1.7.2.3** Users shall be able to state the type of the content (Paper or Project).
      * **1.1.7.2.4** Users shall be able to state whether project/paper is private or public.
      * **1.1.7.2.5** Users shall be able to add co-authors and collaborators during creation of a project.
      * **1.1.7.2.6** Users shall be able to add tags related to project/paper.
      * **1.1.7.2.7** Collaborators shall be able to track the information shared by corresponding users.
      * **1.1.7.2.8** Collaborators shall be able to prepare document or article for submission simultaneously.

#### **1.1.7.3 Paper/Project Page**

* + - * **1.1.7.3.1** Users shall be able to create a new paper.
      * **1.1.7.3.2** Users shall be able to create a new project.
      * **1.1.7.3.3** Users shall be able to see the status of his/her paper(s).
      * **1.1.7.3.4** Users shall be able to see the status of his/her project(s).
      * **1.1.7.3.5** Users shall be able to edit the specifications of his/her paper(s).
      * **1.1.7.3.6** Users shall be able to edit the specifications of his/her project(s).
      * **1.1.7.3.7** Users shall be able to see his/her paper(s) in progress.
      * **1.1.7.3.8** Users shall be able to see his/her project(s) in progress.
      * **1.1.7.3.9** Users shall be able to edit the specifications of his/her paper(s) in progress.
      * **1.1.7.3.10** Users shall be able to edit the specifications of his/her project(s) in progress.
      * **1.1.7.3.11** Users shall be able to invite another user to collaborate on his/her paper(s) in progress.
      * **1.1.7.3.12** Users shall be able to invite another user to collaborate on his/her project(s) in progress.
      * **1.1.7.3.13** Users shall be able to accept or reject another users invitation to collaborate on his/her paper or project

#### **1.1.8 Search Page**

* + - **1.1.8.1** Users shall be able to search; other users, papers, projects, conferences and journals within the system.
    - **1.1.8.2** Users shall be able to filter search results with regards to the research area, topic, scope and difficulty.
    - **1.1.8.3** Users shall be able to find related posts searching related keywords.
    - **1.1.8.4** Users shall be able to view previews of papers/journals/projects/conferences related to their activities, profile and interests.

#### **1.1.9 Events Page**

* + - **1.1.9.1** Users shall be able to see about upcoming conferences related to joined projects/papers.
    - **1.1.9.2** Users shall be able to see closing deadlines of joined projects/papers.
    - **1.1.9.3** Users shall be able to travel in the timeline to see past events.
    - **1.1.9.4** Users shall be able to travel in the timeline to see far future events.
    - **1.1.9.5** Users shall be able to synchronize this calendar with other calendar applications.
    - **1.1.9.6** Users shall be able to view particular event more detailed when clicked/tapped.

### ****1.2 System Requirements****

#### **1.2.1 Search & Recommendation**

* + - **1.2.1.1** System shall support basic search of the available content.
    - **1.2.1.2** System shall support semantic search.
    - **1.2.1.3** System shall provide a tagging system.
    - **1.2.1.4** System shall provide a filtering system. This system filters the content such as projects/papers/profiles showed to the registered user.
    - **1.2.1.5** System shall provide a recommendation mechanism that recommends papers/journals/projects/conferences to the registered user based on the user activities and profile.
    - **1.2.1.6** System shall provide a recommendation mechanism for project owners, to recommend possible collaborators based on their research interests, or previous works in that area.

#### **1.2.2 Homepage**

* + - **1.2.2.1** System shall provide a homepage for each registered user, showcasing recent sharings.

#### **1.2.3 Profile Page**

* + - **1.2.3.1** System shall provide a profile page for each registered user, showcasing their interests, past contributions to projects and papers, their contacts and their related links (example: Google Scholar).
    - **1.2.3.2** System shall retrieve information (example: citations, h-index) of a user from their Google Scholar/ResearchGate pages.

#### **1.2.4 Notifications**

* + - **1.2.4.1** System shall provide a notification mechanism for informing users about the incoming invitations
    - **1.2.4.2** System shall provide a notification mechanism for informing users about whether their request to join a team accepted or rejected
    - **1.2.4.3** System shall provide a notification mechanism for informing users about whether someone accepted or rejected their invitations
    - **1.2.4.4** System shall provide a notification mechanism for informing users about whether someone has commented on their profile
    - **1.2.4.5** System shall provide a notification mechanism for warning users if they perform an unauthorized activity

#### **1.2.5 Events**

* + - **1.2.5.1** System shall provide a page of Events for every registered user.
    - **1.2.5.2** System shall fill this page with the events related to registered user.

## **2. Nonfunctional Requirements**

### ****2.1 Activity Streams****

* + **2.1.1** System shall obey [W3C Standards](https://www.w3.org/standards/)
  + **2.1.2** System shall follow [W3C Activity Streams Model](https://www.w3.org/TR/activitystreams-core/)

### ****2.2 Availability & Accessibility****

* + **2.2.1** The system shall be available as a website and as an Android application.
  + **2.2.2** The website and the application shall be available in English.
  + **2.2.3** The system shall notify users in case of a failure.
  + **2.2.4** Any failure in the system shall be handled in at most half an hour.

### ****2.3 Perfomance & Scalability****

* + **2.3.1** The system shall use queuing algorithms and caching mechanism to reduce response time.
  + **2.3.2** The system shall respond to a request at most 5 seconds.
  + **2.3.3** The system shall be able to respond up to 1000 requests per second.

### ****2.4 Security****

* + **2.4.1** The system shall be protected from unauthorized accesses and attacks to the system and its stored data according to [KVKK](https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6698.pdf)
  + **2.4.2** The system shall force users to use strong passwords that contain a lowercase letter, an uppercase letter, a number and a special character and contain 6-24 characters in total.
  + **2.4.3** The system shall store only the hashed version of passwords.
  + **2.4.4** The system shall force users to change their passwords once a year.
  + **2.4.5** The system shall deny all the access attempts to an account after three failed access attempts until user re-validates his/her account via a link sent in an email.
  + **2.4.6** The system shall provide a validation code for users during registration.
  + **2.4.7** The system shall be protected against SQL injection and DDOS attacks.

# **8. Scenarios and Mockups**

# **9. UML Software Designs**

# **10. Project plan & RAM**