

Milestone WebApps Report

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Group Structure

To manage our work, we have set up the repository on GitHub and used **git** as a main tool to share our code. We made an intensive use of such advanced **git** features such as merging and branching. Yury has usually been making a new branch and working on his part while Arnas was using master branch to push his work on and occasionally we were merging those branches.

In terms of group allocation and organisation, there is not much to say because we are only 2 people and we didn't have any fixed meeting time: we were just meeting up in labs and trying to get done as much work as possible.

Implementation details

Here is a short list of tools we are using to build our website:

- Ruby on Rails (Rails 4.1.1 and Ruby 1.9.3p545)
- Cloud application platform Heroku
- HTML,CSS,JavaScript
- Heroku Postgres database

Rails is a main framework we have been using in our website because it has rich documentation, vast amount of online tutorials and helpful forums plus rich support with various ruby gems. Also, it is well compatible with Heroku. The reason to use Heroku was simplicity of use, free access, rich set of addons provided, in particular, we have used SendGrid and Heroku Postgres::Black addons so far. No need to explain the reasoning behind HTML and CSS as they go on every website. JavaScript is a powerful tool to create animation and can be easily embedded into Rails. And, finally, we are using PostgreSQL because Heroku doesn't support MySQL which is default in Rails.

App Description

The main idea of our app is to implement bughouse chess game online. Main features we would like to present in our website are:

- Rich authorization features i.e secure passwords, sign in using sessions, welcome email, *Forgot my password* feature etc.
- User profiles and leaderboards i.e graphical user status(online/offline), ability to upload profile picture, user statistics(wins,losses,levels etc.), ability to change his credentials etc.
- Random games
 - Users clicks on the button and get's placed into the queue of waiting players
 - Once number of players in this queue has reached multiple of 4 (4 people are needed to play the game of bughouse chess), the game/games automatically starts randomly assigning users into teams
- Users can create their own games
 - User can create a game and invite particular players
 - Ability to invite certain users(≤ 4). Example: I can invite 3 friends of mine to play or I can invite my friend to play and other 2 players will be drawn from the queue of waiting players
- User notifications(invitations to play) appearing where user decides which game he/she would like to join

User Interactions

The main user interactions in our website are:

- Bughouse chess game itself, users make moves and other users are seeing it
- Chat between teammates in the game
- Ability to invite users to play with you

IMPORTANT: ONLY registered users can play