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Puzzle Generator User manual

Team Prometheus

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1 Server setup

1.1 Prerequisites

Ensure that you have the following installed on your system.

1. NodeJS version 12.0+
2. npm version 4.0+
3. PostgreSQL

1.2 Installation on localhost

In order to use the server and load files to be hosted on the website the following needs to be done:

1. Open terminal to the directory which you had cloned/ downloaded the source code from the Puzzle-Generator GIT
2. Enter the following command to install dependencies: **npm install**

```
C:\Users\... \GIT\Puzzle-Generator>npm install
npm WARN deprecated @angular/http@7.2.16: Package no longer supported. Use @angular/common instead, see https://angular.io/
npm WARN deprecated core-js@2.6.11: core-js@<3 is no longer maintained and not recommended for usage due to the number of issues it contains. For more information see https://github.com/zloirock/core-js/issues/803
```

3. Once the dependencies have been downloaded and installed, a post installation task will automatically be run in order to build the relevant Angular files which reside in the subdirectory **/src** and output the built application in the directory **/dist**.

```
> ng build --output-path dist
Generating ES5 bundles for differential loading...
ES5 bundle generation complete.
chunk {polyfills} polyfills-es2015.js, polyfills-es2015.js.map (polyfills) 141 kB [initial] [rendered]
chunk {polyfills-es5} polyfills-es5.js, polyfills-es5.js.map (polyfills-es5) 752 kB [initial] [rendered]
chunk {main} main-es2015.js, main-es2015.js.map (main) 156 kB [initial] [rendered]
chunk {main} main-es5.js, main-es5.js.map (main) 170 kB [initial] [rendered]
chunk {runtime} runtime-es2015.js, runtime-es2015.js.map (runtime) 6.16 kB [entry] [rendered]
chunk {runtime} runtime-es5.js, runtime-es5.js.map (runtime) 6.16 kB [entry] [rendered]
chunk {styles} styles-es2015.js, styles-es2015.js.map (styles) 156 kB [initial] [rendered]
chunk {styles} styles-es5.js, styles-es5.js.map (styles) 158 kB [initial] [rendered]
chunk {vendor} vendor-es2015.js, vendor-es2015.js.map (vendor) 5.07 MB [initial] [rendered]
chunk {vendor} vendor-es5.js, vendor-es5.js.map (vendor) 5.92 MB [initial] [rendered]
Date: 2020-07-23T20:04:36.172Z - Hash: cf9cc37ce258023eb80a - Time: 60058ms
```

4. If a directory **/dist** is not created after calling the command **npm install**, you may use the command **npm postinstall** which will run the command **ng build --output=dist**.
5. In order for the system to run on your localhost, please indicate the following environment variables in order to connect to your postgres database:

- **dbDatabase** = databaseName,
- **dbpass** = database password,
- **dbUsername** = database username,
- **dbHost** = database host

User environment variables:

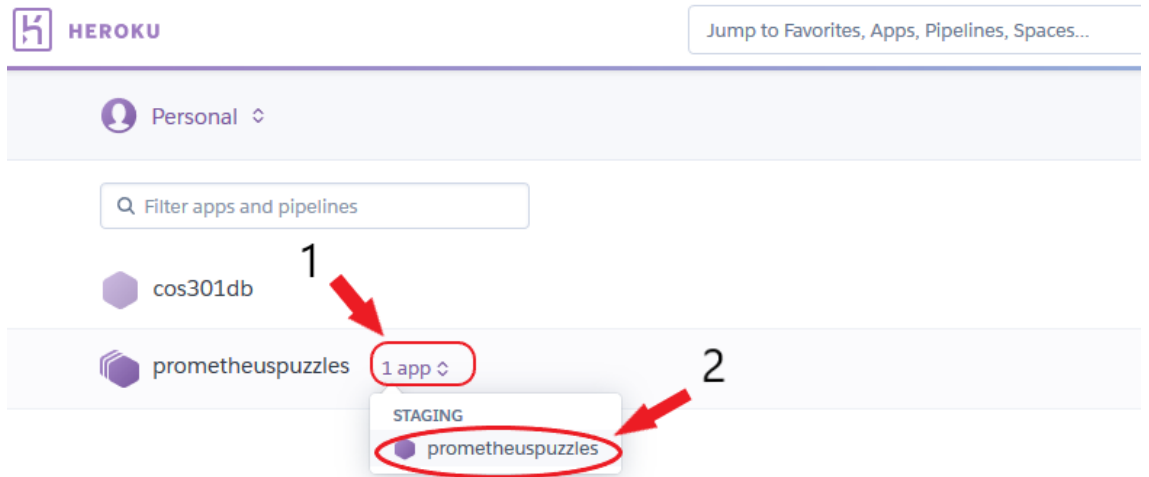
Name	Value
dbDatabase	d[REDACTED].l
dbpass	aC[REDACTED]57...
dbUsername	y[REDACTED]n
dbHost	ec2-[REDACTED].amazonaws.co

6. You are now ready to run the server.
7. To run the server enter the following command into your terminal in the root folder of your app: **npm start**.
8. You are now ready to access your server at **localhost:3200** in your browser.

1.3 Deploying to Heroku

In order to deploy to Heroku, the following needs to be done:

- Sign into the Prometheus puzzles Heroku app, by going to dashboard.heroku.com, and selecting **prometheuspuzzles**



- Select the Deploy tab and select a branch to deploy, after which select "Enable Automatic Deploys" to enable automatic deployment when you push to the selected branch.

Personal > prometheuspuzzles > prometheuspuzzles

GitHub COS301-SE-2020/Puzzle-Generator

Overview Resources **Deploy** Metrics Activity Access Settings

Connected to a pipeline

Assigned to staging in prometheuspuzzles

Manage this pipeline and this app's stage on the [pipeline overview](#)

Review apps are available on the [pipeline overview](#)

Deployment method

Heroku Git Use Heroku CLI

GitHub Connected

Container Registry Use Heroku CLI

HEROKU

Jump to Favorites, Apps, Pipelines, Spaces...

available for this app.

Releases in the [activity feed](#) link to GitHub to view commit diffs

Automatic deploys

Enables a chosen branch to be automatically deployed to this app.

You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#).

Enable automatic deploys from GitHub

Every push to the branch you specify here will deploy a new version of this app. **Deploys happen automatically**; be sure that this branch is always in a deployable state and any tests have passed before you push. [Learn more](#).

Choose a branch to deploy

Website

☒ Wait for CI to pass before deploy

Only enable this option if you have a Continuous Integration service configured on your repo.

Enable Automatic Deploys

Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more](#)

Choose a branch to deploy

Website

Deploy Branch

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1.4 Customizing your server

1. Changing server's default port

If you wish to alter the default server port on localhost, you may do so by modifying the file: **/bin/www** and locating the variable **PORT**

1.5 Adding your web pages to be deployed

1. All additional web pages and subsequent CSS and JavaScript files intended for the use of the user should be placed in **/src /src/app**

2. In order to access the API the following routes are used:

- /routes/user
- /routes/puzzles

3. By default all links to the API (in the front end Angular files /src/app) will point you to the API hosted on Heroku.

2 Accessing the website

In order to access the website you can follow the following link: <https://prometheuspuzzles.herokuapp.com/>. From here you will be greeted with our homepage, where you have the options to login or sign up, or simply browse through the available puzzles to view.

2.1 Website features

2.1.1 Splash page

The splash page is used as a page where users can sign up or login.

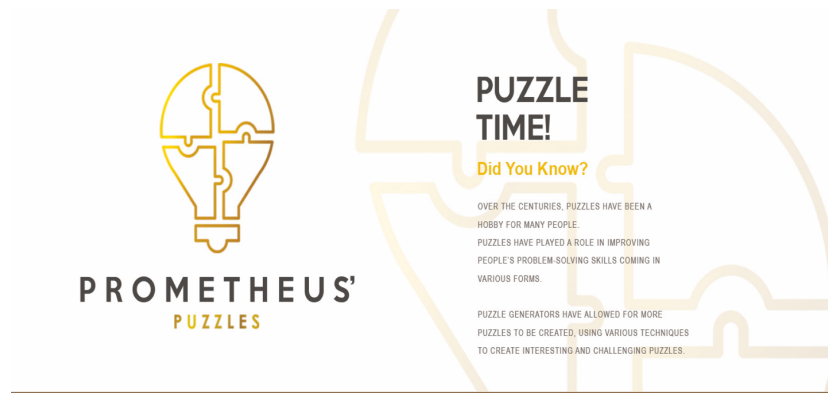


Figure 1: Splash Page - Part 1

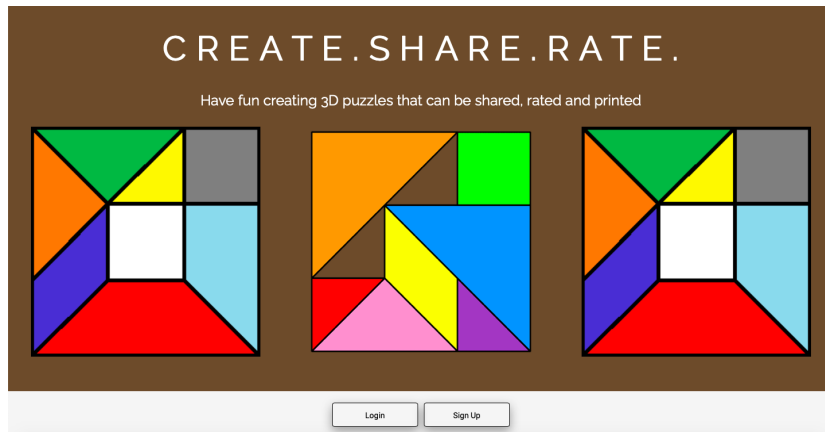


Figure 2: Splash Page - Part 2

2.1.2 Sign up

The user will be able to click on the sign up button on the splash page where they will be redirected to a sign up form. Once a user has signed up, they can log in using their personal details.

Figure 3: Sign Up

2.1.3 Login

The user can click on the login button on the splash which will redirect them to the login form. Once a user has logged in they can create, rate and view puzzles and also view their own profile page. On the login form the user can change their password if they forgot it.

Login

Enter your email *

john@doe.com

Email is required

Enter your password *

Login Cancel

[Forgot Password](#)

Figure 4: Login

2.1.4 View

The view page shows all created puzzles by other users that has been shared. By clicking on a specific puzzle, you can rate or solve the puzzle. At the top of the page there is a search bar to search for specific puzzles.

View Create Profile + Hello, First User Logout

Search [Reset Search Criteria](#)

LET'S PLAY

My First Puzzle
Created by First User
Rating: 3.00/5
Date: 2020-07-23
Description: Colors colors colors

Manhattan Piece
Created by First User
Rating: 3.25/5
Date: 2020-07-23
Description: Trial one

For Minnie
Created by Mickey Man
Rating: 4.50/5
Date: 2020-07-23
Description: Daisy Day

Meeting Puzzle
Created by Dr Who
Rating: 0/5
Date: 2020-07-23
Description: Pay attention

Figure 5: View page with search functionality

2.1.5 Rate

When a user clicks on the rate button on the view page there will be a popup form where the user can rate other users' puzzles.

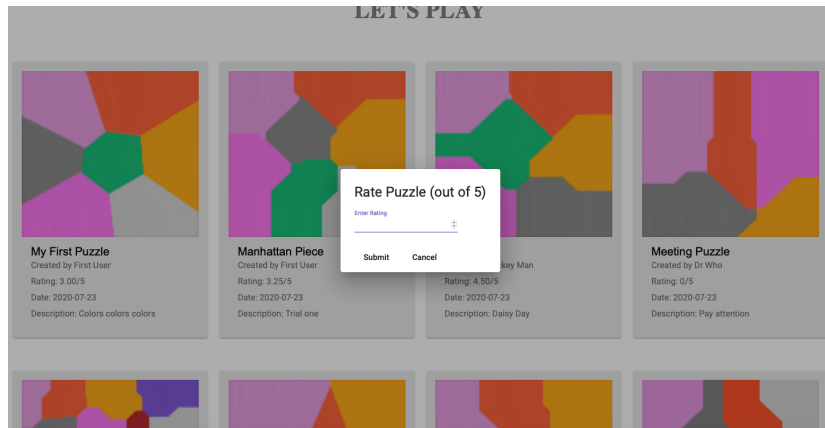


Figure 6: Rate pop-up form

2.1.6 Create

A logged in user can go to the create tab and start creating their own puzzle. They will be given a canvas with a square, when clicking on the square and then clicking the generate button the puzzle will be created. They can choose weather to use Euclidean algorithm or Manhattan algorithm. This provides the user with the means to create two different puzzles with the same points. The amount of times the user click on the square, is the amount of pieces the puzzle will have.

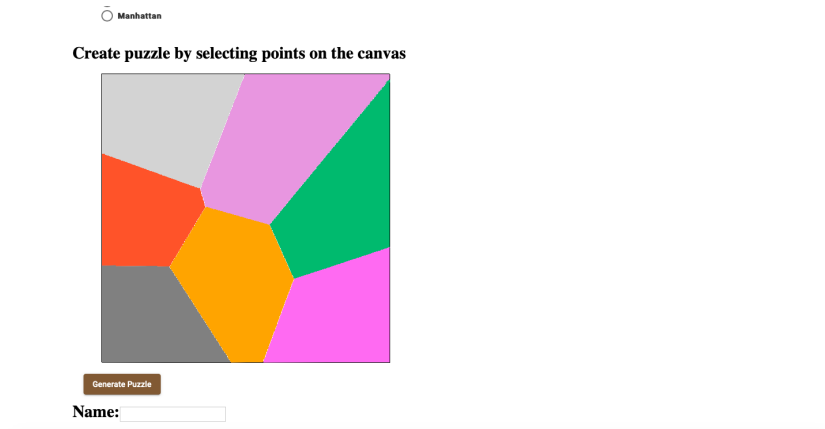


Figure 7: Create page after canvas clicked and generate clicked

2.1.7 Profile - Details

The profile details page gives the logged in user the opportunity to update their username and email address.



Figure 8: Profile page with details

2.1.8 Profile - Puzzles

The profile puzzles page shows all the puzzles that the user created. From here the user can share or stop sharing a puzzle.

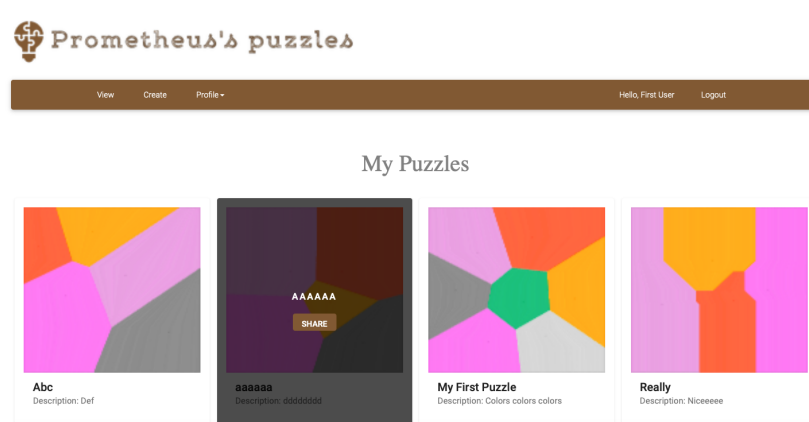


Figure 9: Profile page with own puzzles and share/stop sharing functionality

2.1.9 Profile - Ratings

The profile ratings page shows all the ratings that the user created. Here they can update the ratings that they made.

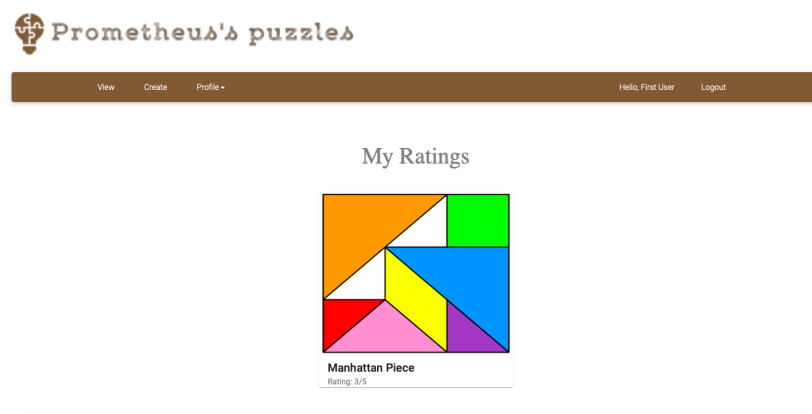


Figure 10: Profile page with own ratings