Presented by:

Dominic Gargala

In this document, you find a step by step guide on how to set up, use and deploy   
your own citizen science web application.

cITIZEN SCIENCE PORTAL   
WEB APPLICATION

Step by Step Guide

Table of Contents

[1.0 General information 2](#_Toc29855487)

[1.1 Required Downloads/Sign-ups 2](#_Toc29855488)

[2.0 Start by forking GitHub repository to one’s GitHub Account 3](#_Toc29855489)

[3.0 Downloading project files onto your local computer 4](#_Toc29855490)

[4.0 Set up web application 5](#_Toc29855491)

[4.1 Locate and run web application 5](#_Toc29855492)

[4.2 Create an admin account 5](#_Toc29855493)

[5.0 Make edits to web application 6](#_Toc29855494)

[5.1 Make edits to dynamic form 7](#_Toc29855495)

[5.2 Make edits to web page 7](#_Toc29855496)

[6.0 How to deploy the web application 9](#_Toc29855497)

[6.1 Set up MongoDB Atlas database and create collection 9](#_Toc29855498)

# 

# 1.0 General information

The general information section explains in general terms the web application and the purpose for which it is intended.

## 1.1 Required Downloads/Sign-ups

Download and install the following:

1. NodeJs - <https://nodejs.org/en/download/>

2. GitHub Desktop - <https://desktop.github.com/>

Sign-up for the following:

1. GitHub - <https://github.com/>

2. Heroku - <https://heroku.com/>

3. MongoDB Atlas - <https://www.mongodb.com/cloud/atlas>

# 2.0 Start by forking GitHub repository to one’s GitHub Account

Step 1

Visit GitHub through the following link <https://github.com/> and make sure you are signed in.

Step 2

Visit the following link <https://github.com/DomGarg/Citizen-Science-Web-Creator---Front-end> and click the “Fork” button on the top right corner of the page, as shown in the photo below. This will create a copy of the front-end repository used in the project and move it into your account.

Step 3

Repeat the previous step with the following link <https://github.com/DomGarg/Citizen-Science-Web-Creator---Back-end>. This will create a copy of the back-end repository used in the project and move it into your account.

\*The front-end and back-end repositories are the working parts of the citizen science web application that will be deployed to the Heroku servers. More on this later.

# 3.0 Downloading project files onto your local computer

Step 1

Locate GitHub Desktop (1.1 Required downloads) on your computer and run it.

Step 2

Log-in using your GitHub credentials.

Step 3

From there, you will see an introduction page with multiple options/buttons. Click the second button with the label “Clone a repository from the Internet”, as shown in the photo below.

Step 4

You will see a pop up come up with a list of your repositories on your GitHub profile. Select the GitHub repository called “Citizen Science Web Template Front-End” and click “Clone”, as seen in the photo below.

# 4.0 Set up web application

## 4.1 Locate and run web application

Step 1

On GitHub Desktop, with your repository opened, click the “Show in Explorer” button to locate the project on your local computer, as shown in the photo below. Locate and run the CitizenScienceWeb.exe file.

Step 2

Once the application is opened, locate the “Start” button on the main window of the application and click it.

Step 3

Allow enough time for the web application to open a tab in your default browser. In this tab, you will observe a template for the citizen science web portal, as seen in the photo below.

## 4.2 Create an admin account

Step 1

Click the “Register” button and proceed to put in personal credentials. When Admin Access Code is reached, enter “admin1234” and proceed to submit. From there, you will be redirected to the login page where you can login with these credentials. To improve security of the collected data, please proceed to Step 2.

Step 2

With the main window of the application open, click the “Make Edits” button to open another window.

Step 3

From there, click the “Change Admin Code” button which brings you to a window with an input line and save button. Proceed to type in your custom admin code and save. This will only allow users with this specific admin code to access all the data submitted to the database.

# 5.0 Make edits to web application

## 5.1 Make edits to dynamic form

Step 1

On the main window of the application, click the “Make Edits” button to open another window.

Step 2

From here, click on the “Edit Interface” button which brings you to a window with multiple options.

Step 3

Now, you can add inputs to the dynamic form using the dropdown button to select an input and then clicking the “Add Input” button as shown in the picture on the right. To delete an input, click on the “X” button located beside the input options.

Step 4

To see the changes you made, click on the “Refresh Localhost” button as shown in the picture on the right. This will refresh the web page tab and show the new changes to the dynamic form.

Step 5

To make any font/color changes to the dynamic form, in the “Make Edits” window click on the “Change Style” button to explore these options.

## 5.2 Make edits to web page

Step 1

On the main window of the application, click the “Make Edits” button to open another window.

Step 2

From here, you will see buttons such as “Change Lower Image” and “Change Lower Text”. These correspond to changes that can be made to the lower section of the web page.

Additionally, there is a button “Change Background” which corresponds to the background image behind the dynamic form. Note that when pasting an image link, be sure that it is large enough to the fit the entire background.

# 6.0 How to deploy the web application

## 6.1 Set up MongoDB Atlas database and create collection

Step 1

On the main window of the application, click the “Make Edits” button to open another window.