Nereus User Guide

Sudhan Chitgopkar, Elodie Collier, Saba Merchant, Venusly Yang

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Contents

1	The Entry Point	2
2		3
	2.1 Downloading XAMPP	3
	2.2 Managing XAMPP Servers	3
	2.3 Copying Source Files	
	2.3.1 Using Git	4
	2.3.2 ZIP Download	5
	2.3.3 Copying into htdocs	5
	2.4 Opening Nereus	6
3	Functionality	9
4	Supported Browsers/OS	9
5	Libraries/Frameworks Used	10
6	Code	10
7	Directory Structure	11

1 The Entry Point

As conventional with web projects, index.html is the entry point for Nereus. It points to the Nereus home page, which provides users with an initial look at the application, can allow existing users to manage their profile (i.e. log in, log out, and browse matches), and allows new users to register.

This index.html file can be accessed in a variety of ways. To view the file statically without using a local server, the index.html file may simply be opened from the downloaded Nereus source code. Note that using this approach will not allow users to register, log in, or use any server-side functionality of the application as it does not involve the use of a local server. As such, this method is not recommended. The recommended method of entering the application through the index.html file is simply by accessing the Nereus URL on your localhost. Steps on doing this are listed below in section 2.

2 Starting Nereus

2.1 Downloading XAMPP

As Nereus is built using HTML, CSS (+ Bootstrap), JavaScript, MySQL, and PHP, XAMPP should be used to build and run Nereus (though other stacks may also be used). Begin by ensuring that a working version of XAMPP (Version 7.3.33 - 8.0.13) is downloaded and functional on your machine. This tutorial utilizes XAMPP Version 8.0.13 (the latest stable release), though many steps will be the same for previous versions of XAMPP. XAMPP can be downloaded from the official downloads page for Linux, Windows, and OSX. Upon opening XAMPP, the following screen should appear:

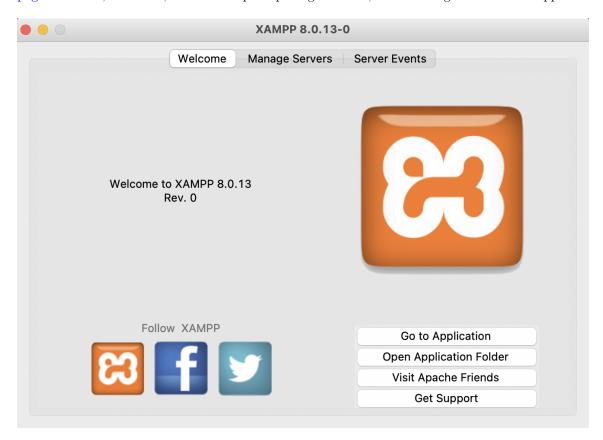


Figure 1: XAMPP Home Page

2.2 Managing XAMPP Servers

Begin by booting up your local Apache Web Server, ProFTDP, and MySQL database within XAMPP. All of these servers are required to run Nereus. To do this, navigate to the "Manage Servers" tab within your XAMPP dashboard. Start all of the servers using the bottom left button, "Start All." Once all servers have been started, the dshboard should look as follows:

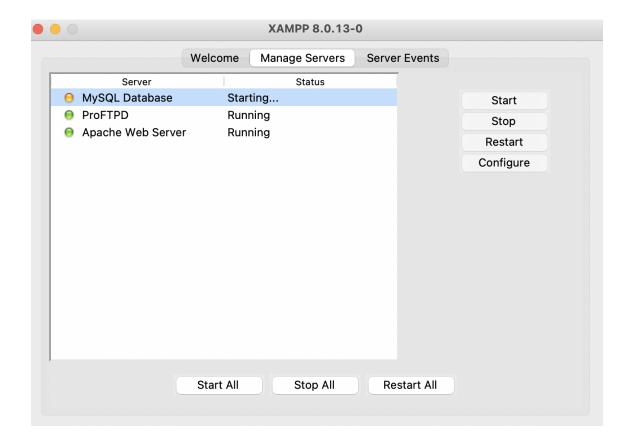


Figure 2: XAMPP Servers Started

2.3 Copying Source Files

Once all local servers have begun running, Nereus source code will need to be copied from the open-source GitHub Repository. This may be done in one of two ways: (1) Using Git or (2) by downloading a ZIP file of the source code.

2.3.1 Using Git

With a working Git installation, open your command line and type the following command into the directory in which you'd like the source code to be copied:

\$ git clone git@github.com:sudhanchitgopkar/nereus.git

The source code will now exist in the directory you're currently within inside of a sub directory called Nereus.

2.3.2 ZIP Download

If you prefer to download source code without using Git, access the GitHub Repository. From here, click on the green "Code" dropdown in the top right hand corner. The screen should look as follows:

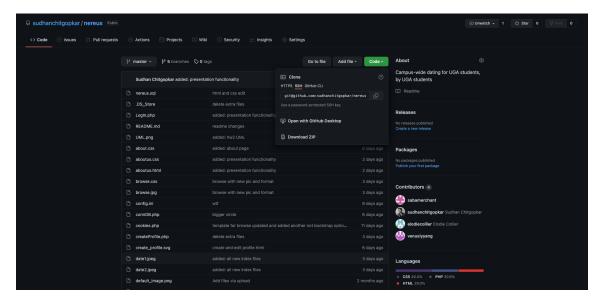


Figure 3: Repository Donload Page

Click the "Download ZIP" button. The Nereus ZIP file should now be in your downloads. Unzip the file and move it to a directory of your choosing.

2.3.3 Copying into htdocs

Now that the source code exists on your local machine, it will need to be copied into XAMPP's htdocs directory. To access the file path for this directory, navigate to the "Welcome" page of the XAMPP dashboard. Click on the "Open Application Folder" button in the bottom right to have the application folder open. You should see a list of folders and files used by XAMPP, as follows:

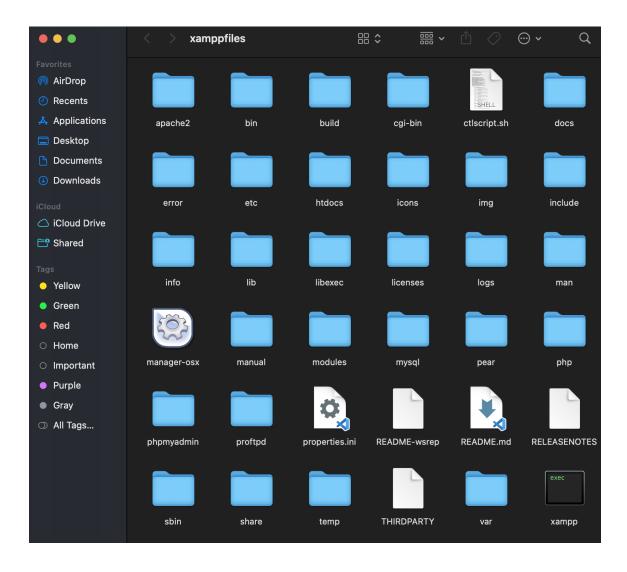


Figure 4: XAMPP Files

From here, click on the htdocs folder. Copy your newly downloaded Nereus source code folder into htdocs.

2.4 Opening Nereus

To open Nereus, simply open your localhost. To do this using XAMPP, press the "Go to Application" button on the XAMPP homepage. Replace the current URL with the following URL¹:

localhost/nereus

 $^{^{1}\}mathrm{This}$ URL may change depending on the port your local host is running on.

Note, this URL may change depending on the port your localhost is running on. Nereus should open up to the <code>index.html</code> page with full functionality. If all goes well, you should see the following screen:

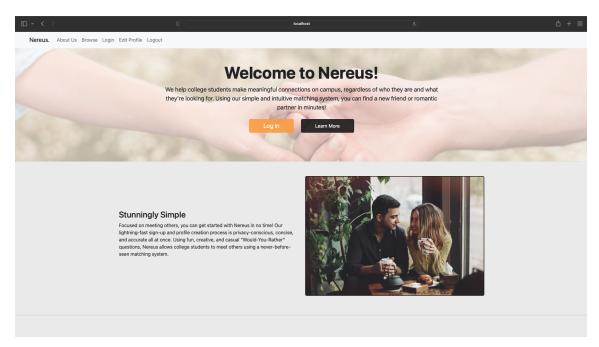


Figure 5: Nereus Home Page

Importantly, you'll need to set up Nereus' databases before you get started. These steps are also laid out verbatim in the submitted final documentation. If you've followed that in its entirety, you do not need to repeat these steps. If you haven't set up your databases yet, though, begin by navigating to you localhost's PHPMyAdmin, and find your SQL execution prompt.

Enter the following command to create your database.

CREATE TABLE nereus;

Then create your database tables with the following three commands, in order.

```
CREATE TABLE accountInfo (username VARCHAR(30) NOT NULL , password VARCHAR(30) NOT NULL , email VARCHAR(320) NOT NULL , PRIMARY KEY (username));
```

```
CREATE TABLE profileInfo ( firstName varchar(10) NOT NULL UNIQUE, lastName

varchar(15) NOT NULL, bio varchar(150) NOT NULL, age int NOT NULL, jobTitle

varchar(15) NOT NULL, sex varchar(15) NOT NULL, lookingForSex varchar(15)

NOT NULL, relationType varchar(15) NOT NULL, instagram varchar(60) NOT NULL,

twitter varchar(150) NOT NULL, spotify varchar(150) NOT NULL, username

varchar(50), FOREIGN KEY (username) REFERENCES accountInfo(username));
```

```
CREATE TABLE questionsInfo ( one int NOT NULL, two int NOT NULL, three int NOT OULL, four int NOT NULL, five int NOT NULL, username varchar(50), FOREIGN KEY (username) REFERENCES accountInfo(username));
```

Finally, seed your databases with the following three commands, in order.

```
INSERT INTO accountInfo VALUES ('sabamerchant', 'myPasswo@rd',

'saba@gmail.com'), ('venus', 'password@12','venus@gmail.com'), ('lod',

'passw\%rd','lod@gmail.com'), ('sudhan', 'p@$$wOrd','dude@gmail.com'),

('joanne', 'thisPassW\%rd','joanne@gmail.com'), ('jeffery',

'myP@\$\$wOrd','jeffery@gmail.com');
```

```
INSERT INTO profileInfo VALUES ('Saba', 'Merchant', 'Looking for a good time',

    '21', 'student', 'Female',

→ 'Male', 'Serious', 'https://www.instagram.com/saba_merchant123/','
→ https://twitter.com/SabaMerchant6','
https://open.spotify.com/user/fhk5k0ei207rdsw76iv5kggaz?si=f44bfd8b52194d3b',
'sabamerchant'), ('Venusly', 'Yang', '8 feet tall CS
→ Major', '21', 'barista', 'Female', 'Male', 'Serious',
'https://www.instagram.com/venusly.y/'
,'https://twitter.com/','https://open.spotify.com/','venus'),
→ ('Elodie', 'Collier', 'I love to dance and tell funny jokes', '21', 'Tutor',
→ 'Other', 'Female', 'Friends', 'https://www.instagram.com/elodiecollier/',
'https://twitter.com/elodiecollier','https://open.spotify.com/','lod'),
('Sudhan','Chitgopkar','UGA Student', '18', 'Intern', 'Male', 'Female','Fling','
→ https://www.instagram.com/not.sudhan/','https://twitter.com/',
'https://open.spotify.com/user/sudhan.chitgopkar?si=92f9aeb83e5f40ee','sudhan')
,('Joanne','Vafi','Night Owl', '20', 'Coder', 'Female', 'Male','Fling','
→ https://www.instagram.com/','https://twitter.com/',
'https://open.spotify.com/','joanne'),('Jeffery','John','Fish Caretaker at its

    finest', '21', 'Coder', 'Male',

→ 'Female','Friends','https://www.instagram.com/',
'https://twitter.com/','https://open.spotify.com/','jeffery');
```

3 Functionality

Nereus has a variety of functionality including:

• Account Functionality

Registering for an account

Logging in to existing accounts

Logging out without closing sessions manually

Saving login sessions

• Profile Management

Creating a new dating profile

Editing a created dating profile

• Matching Users

Algorithmic matching of compatible users

Browsing user database

Connecting with matched users via social media

Changing top match based on profile edits

• Application Security

Input validation of all fields

Password strength validation

Javascript + PHP regex checking

4 Supported Browsers/OS

Nereus has been tested on, and has full functionality for the following systems:

- Mac OS Monterey (ARM) (12.0.1)
- Mac OS Big Sur (x86) (11.1)
- Windows 11 (64 bit)
- Arch Linux (x86) (2021.11.01)

Nereus also has full functionality for the following browsers:

• Chrome: Version 96.0.4664.55 (Official Build) (arm64)

• Chrome: Version 96.0.4664.55 (Official Build) (x86_64)

• Safari: 15.1 (17612.2.9.1.20)

5 Libraries/Frameworks Used

Nereus is built using HTML5, CSS3, MySQL, PHP, and vanilla JavaScript. The only framework used is Bootstrap 5, on top of CSS3, which provides a set of classes specially designed for responsive, mobile-first design.

6 Code

No starter code was used for this project. All source code, files, and images are open-source and available at this project's GitHub Repository.

7 Directory Structure

```
images
    aboutus.jpg
   _browse2.jpg
   _{
m create.jpg}
   _{
m date1.jpeg}
   _{
m date2.jpeg}
    genericprofile.jpg
   _{-} handholding.jpg
    login.jpeg
   _logout.jpg
   _portrait1.jpg
   _{
m portrait2.jpg}
    portrait3.jpg
   \_register.jpg
   \_ regexValidation.js
 static
    error.html
 __aboutus.html
style
   _aboutus.css
   _browse.css
   _ep.css
    index.css
    profstyle.css
    style.css
 documentation
   _nereus.sql
   _userGuide.pdf
   \_ externDocumentation.pdf
_logIn.php
_config.ini
\_ createProfile.php
_editProfile.php
\_ ep.html
_ep.php
\_ index.html
_logOut.php
\_ newBrowse.php
_{-} profile.html
register.php
_{
m \_}session.php
_README.md
```