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Jnana Sangama, Belagavi – 590 018.



A MINI PROJECT REPORT

On
“FLARUM”

Submitted in partial fulfillment of the requirement for the curriculum of the 7th Semester

Bachelor of Engineering
In
Computer Science & Engineering

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Certificate

This is Certified that the mini-project work entitled “**FLARUM**” carried out by **Navya Nj (1VI17CS061), Rajashree(1VI17CS114)** are bonafide students of **Vemana Institute of Technology** in partial fulfillment for the completion of **Web Technology laboratory** of **Bachelor of Engineering in Computer Science and Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2020-2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The mini-project report has been approved as it satisfies the academic requirements in respect of the mini-project work prescribed for the said degree.

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ABSTRACT

Flarum is a web-based tool which delightfully simple discussion platform. Any user can post the doubts topics and can reply for the other userdoubts. The user can invites others for Discussion and submit query. This is useful for asmall office, school or a department or for that matter any group who is interested toorganize it effectively. Facility to share the resource and post articles that can be viewed by registered user.

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LIST OF ABBREVIATIONS

| | | |
|-------|---|--|
| TOTP | : | Time-based One-time Passwords |
| HTML | : | Hypertext Markup Language |
| MYSQL | : | Structured Query Language. |
| PHP | : | Hypertext Preprocessor |
| SRS | : | software requirements specification |
| MB | : | megabyte |
| VGA | : | Video Graphics Array |
| XAMPP | : | cross-platform, Apache, MySQL, PHP and Perl, |
| CSS | : | Cascading Style Sheets |
| CGI | : | Common Gateway Interface |
| CLI | : | Command-line interface |
| UAC | : | User Account Control |
| HTTP | : | Hypertext Transfer Protocol |

CHAPTER 1

INTRODUCTION

Flarum enable a more personalized user experience by having custom social media badges on your profiles and user-enabled dark mode. It provides multiple login methods so you don't need yet another account. It support login methods include our Development Tracker, GitHub, and traditional username / email + password. It enable two-factor authentication, which supports any authentication application that supports TOTP. IT is more flexibility in how we organize our discussions, with support for primary and secondary tags. The availability of user-created extensions for media embedding, custom reactions, discussion and more. Provide feedback on documentation, our website, and more. Report issues ranging from packaging to hardware issues, that can be further escalated to Phabricator if necessary. Engage with other community members, showcase their artworks / wallpapers, etc. Engage with the Team on announcements, whether that's coming from our cross-posted blog posts or future Activity Hub-based.

1.1 Objective

- To design a Flarum System for the online discussion platform
- To design and see the text and can post of the discussion. Below you will find the replies that have been posted.
- The view will be basically the same as in the previous case, the only difference being the 'Add a new discussion' option.
- Display replies flat, with oldest first
- Display replies flat, with newest first - The discussion will be displayed in one line and the chronological order from the newest to the oldest. This is the same as the above, just a different sort order.
- Display replies in threaded form - Only the post starting the discussion will be displayed in its full form; replies will be reduced to the headlines and organized chronologically; moreover, replies will be shifted towards the right so that only replies to the same post were in the same line.

1.2 Existing System

In the previous existing the Discussion Flarum project system, there was no proper moderation channel where the person cannot keep an eye, what's going on and the rules are being followed by all existing users. There was no proper communication channel. Previously, users were not able to get admin messages and options to create their community and send friend request to existing users. There was no check performed on validation and type of questions to be entered under particular forum. In existing system, there was no proper password recovery method, and the admin does not have the power to block users, their activity and points which is assigned to them.

1.3 Proposed System

In this new PHP based technical Flarum, there will be three type of users who will interact this system and control the various activity. These three users will be: admin, moderator and the users. Users will be responsible to enter questions in particular forum, get their answers, make reply to existing posts, check scores of other users, access message dialog box and make changes through their profile settings. It's the moderator, who will have the authority to approve questions and answers posted by the registered users. Admin will keep track on various activity of users and the moderators. Among these, there are other features, like displaying the posts based on various parameters like recent posts, displaying in ascending or descending order, by date etc, switch to other forums, checkonline users and send friend requests.

CHAPTER 2

REQUIREMENT ANALYSIS

2.1 Function Requirements

- The system runs of xampp so it is needed that server must have apache server.
- We have used HTML for server-side scripting so the current version of HTML must be available on the server
- MySQL database has been used for storing the data of the website
- HTML has been used for creating the layout of the web application
- CSS has been used for creating the designing of the webpages
- PHPScript scripting language has been implemented on the system for performing all of the Client-Side Server Validation.

2.2 Non Function Requirements

- Performance: System should be able handle multiple users at a time using any of the web browsers.
- Reliability: Database updating should follow transaction processing to avoid data inconsistency.
- Availability: The project will be deployed on a public shared server so it will be available all the time and will be accessible anywhere of the world using internet.
- Security: We have implemented a lot of security mechanism to avoid to hack the system by outer world.
- Maintainability: It is very easy to maintain the system. The system has been developed on HTML so anyone who has the knowledge of HTML, can easily maintain the system
- Portability: Yes this system is portable and we can switch the servers very easily.
- Browser Compatibility: The project being web based required compatibility with at least the popular web browsers. Microsoft Windows XP and above, Linux and Macintosh

CHAPTER 3

SOFTWARE REQUIREMENT SPECIFICATION

A **software requirements specification** (SRS) is a detailed description of a software system to be developed with its functional and non-functional requirements. The SRS is developed based the agreement between customer and contractors. It may include the use cases of how user is going to interact with software system. The software requirement specification document consistent of all necessary requirements required for project development. To develop the software system we should have clear understanding of Software system. To achieve this we need to continuous communication with customers to gather all requirements.

3.1 Hardware Requirements

- Processor : Intel core processor i5
- Main memory : 512 MB and above
- Hard Disk : 10MB
- Mouse : Logitech
- Keyboard : Standard Window Keyboard
- Monitor : 15 VGA Color

3.2 Software Requirement

- Operating system : Windows 10
- Backend : PHP
- Web Server : XAMPP
- Front end : HTML,CSS,Javascript,bootstrap
- Data Base : MYSQL
- Default Browser : Google Chrome

CHAPTER 4

DESIGN

4.1 system Design

- Design phase of software developed deals with transforming the customer's required into working system.
- Design various blocks for overall system processes and database structures.
- Specify details of programs to achieve desired functionality.
- Design the forms of inputs, outputs of the system and documentation of the design

4.2 Use Case Diagram

A **use case diagram** at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses.

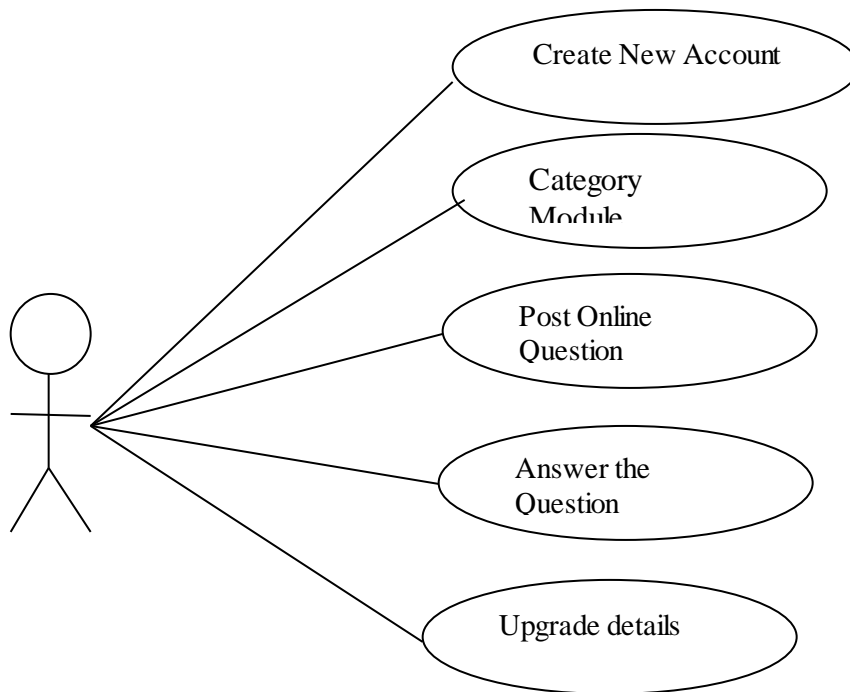


Figure 4.2.1

The use case diagram for Flarum is shown in figure 4.2.1, Some of the use case are:

- i. Category Module
- ii. . Post Question Module:
- iii. Answer Module
- iv. Upgrade details

1 Category Module:

- This module is the main module, by selecting the category user can post their questions easily. They can retrieve the answers for their questions from the different users.

2. Post Question Module:

- This module is mainly for the registered users. As the Administrator has to know who has posted the questions the user is registered here. These registered users alone can post their question in detailed manner.

3 .Answer Module:

- Each and every posted question will get the exact answer from the Discussion Forum team and also they can get a lot of answers from the different user.

4.Upgrade Details

- Users can answer the questions which are posted in this site. Both registered and non registered user is benefited over this module. They can also view the answers posted in this site.

Chapter 5

IMPLEMENTATION

Flarum is a web-based application that brings people together with shared interest and mind-set. The use of Flarum has emerged as a common tool and an effective way of engaging students outside the classroom¹. Flarum is an e-learning platform that provides students with privilege to post messages to the discussion threads, interact and receive feedback from other students and instructor, and hence create a deeper understanding of the subject matter being discussed. In education, they have been deployed to complement traditional learning techniques such as lectures and tutorials². Flarum harmonize with the educational philosophy that makes communication a necessary tool and fundamental mechanism for effective learning⁴. It was discovered that the interaction of the learners with both human and inanimate objects, and their participation in technology mediated education, were essential for the quality of their learning experience, which can enrich the process of knowledge exchange among participants and has positive effects on the students' performance¹⁰. Consequently, Flarum can be successful in enhancing collaborative learning by attracting students to participate and interact⁸.

5.1 Tools and languages used

5.1.1 PHP

PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Various web template systems, web content management systems, and web frameworks exist which can be employed to orchestrate or facilitate the generation of that response. Additionally, PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control. Arbitrary PHP code can also be interpreted

and executed via command-line interface (CLI).

5.1.2 Xampp

Is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

5.1.3 Bootstrap

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS and (optionally) JavaScript based design templates for typography, forms, buttons, navigation, and other interface components.

Bootstrap is among the most starred projects on GitHub, with more than 142,000 stars, behind freeCodeCamp (almost 312,000 stars) and marginally behind Vue.js framework.

5.1.4 Code

```
include "db.php";
extract($_POST);
$name = str_replace("'", "", $name);
$name = mysqli_real_escape_string($con, $name);
$lname = str_replace("'", "", $lname);
$lname = mysqli_real_escape_string($con, $lname);
$username = str_replace("'", "", $username);
$username = mysqli_real_escape_string($con, $username);
$password = str_replace("'", "", $password);
$password = mysqli_real_escape_string($con, $password);
$password = md5($password);
$sql = "INSERT INTO `tbluser`(`fname`, `lname`, `gender`) VALUES ('$fname','$lname','$gender')";
$result = mysqli_query($con, $sql);
if ($result) {
    $a = mysqli_query($con, "SELECT * FROM `tbluser` WHERE `fname` = '$fname' ");
```



```

$aa = mysqli_fetch_array($a);

if ($a) {
    $aaa = $aa['user_Id'];
    $sql = "INSERT INTO `tblaccount`(`username`, `password`, `user_Id`) VALUES('$user
name','$password',$aaa)";
    $res = mysqli_query($con, $sql);
    if ($res == true) {
        echo '<script language="javascript">';
        echo 'alert("Successfully Registered")';
        echo '</script>';
        echo '<meta http-equiv="refresh" content="0;url=../index.php" />';
    }
}
}

```

Comment function

```

include "db.php";

$comment = mysqli_real_escape_string($con,$_POST['comment']);
$userid = $_POST['userid'];
$postid = $_POST['postid'];
date_default_timezone_set("Asia/Kolkata");
$datetime=date("Y-m-d H:i:s");

$comment = mysqli_query($con,"Insert into tblcomment (comment,post_Id,user_Id,date
time) values ('$comment','$postid','$userid','$datetime') ");

$sql = mysqli_query($con,"SELECT * from tblcomment as c join tbluser as u on c.user_
Id=u.user_Id where post_Id='$postid' and c.user_Id='$userid'
and c.datetime='$datetime'");

while($row=mysqli_fetch_assoc($sql)){
    echo "<label>Comment by: </label> ".$row['fname']." ".$row['lname']."<br>";
    echo '<label class="pull-right">'.$row['datetime'].'</label>';
    echo "<p class='well'>".$row['comment'].'</p>";
}


```

Chapter 6

Results

VIT FLARUM

Discussion With Peoples



Register Here!

Figure 6.1 Home Page

VIT FLARUM
Post a Question
raji
Logout

Latest Discussion

| Networking | | |
|---|------------|-------------------------------------|
| Topic title | Category | Action |
| Which layer is used for mac address? | Networking | <input type="button" value="View"/> |
| which command in window is used to change from one directory to other | Networking | <input type="button" value="View"/> |
| what i network | Networking | <input type="button" value="View"/> |

| Project | | |
|---|----------|-------------------------------------|
| Topic title | Category | Action |
| which is the first topic written in project Report? | Project | <input type="button" value="View"/> |

Figure 6.2 Latest Discussion

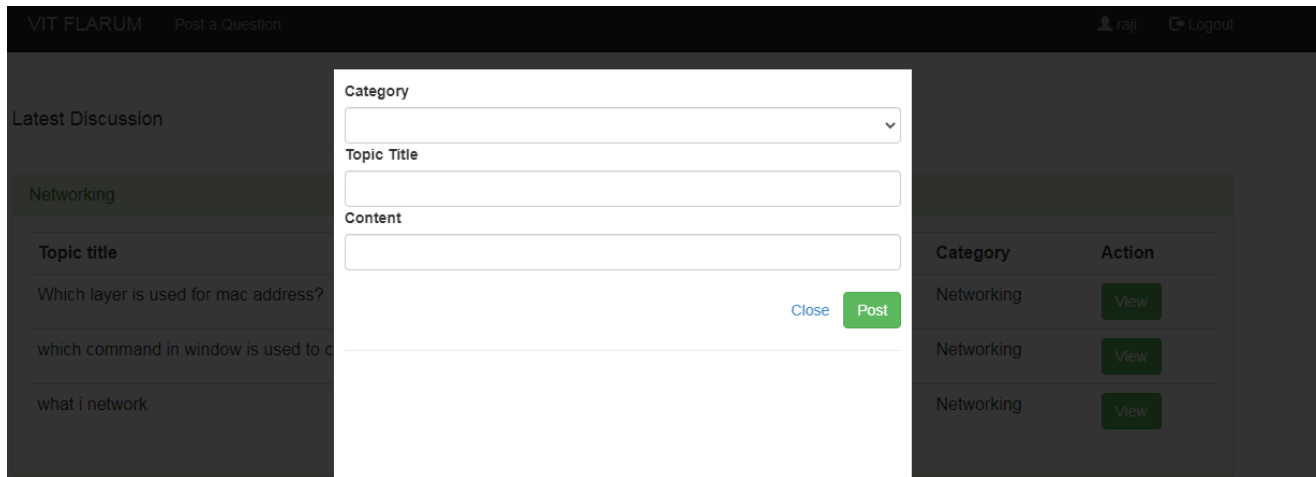


Figure 6.3 Posting the question



Figure 6.4 Sucessfully Posting Question

Comments

Comment by: Rajashree Y

data link layer2021-01-07 12:20:46

Comment by: Rajashree Y

second layer2021-01-07 13:37:17

Comment

Comment

Figure 6.5 Comment the posted question

CONCLUSION

It is concluded that the application works well and satisfy the both registered and registered. The application is tested very well and errors are properly debugged. The site is simultaneously accessed from more than one system.

The site works according to the restrictions provided in their respective browsers. The speed of the transactions become more enough now. In this site the user can search the appropriate answers for their questions.. They can view their favorable questions, articles and inventions.

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APPENDIX-A

Installing XAMPP

Our XAMPP tutorial will take you through the installation process for the software package on Windows.

Step 1: Download

XAMPP is a release made available by the non-profit project Apache Friends. Versions with PHP 5.5, 5.6, or 7 are available for download on the Apache Friends website.

Step 2: Run .exe file

Once the software bundle has been downloaded, you can start the installation by double clicking on the file with the ending .exe

Step 3: Deactivate any antivirus software

Since an active antivirus program can negatively affect the installation process, it's recommended to temporarily pause any antivirus software until all XAMPP components have successfully been installed.

Step 4: Deactivate UAC

User Account Control (UAC) can interfere with the XAMPP installation because it limits writing access to the C: drive, so we recommend you deactivate this too for the duration of the installation process. To find out how to turn off your UAC, head to the Microsoft Windows support pages.

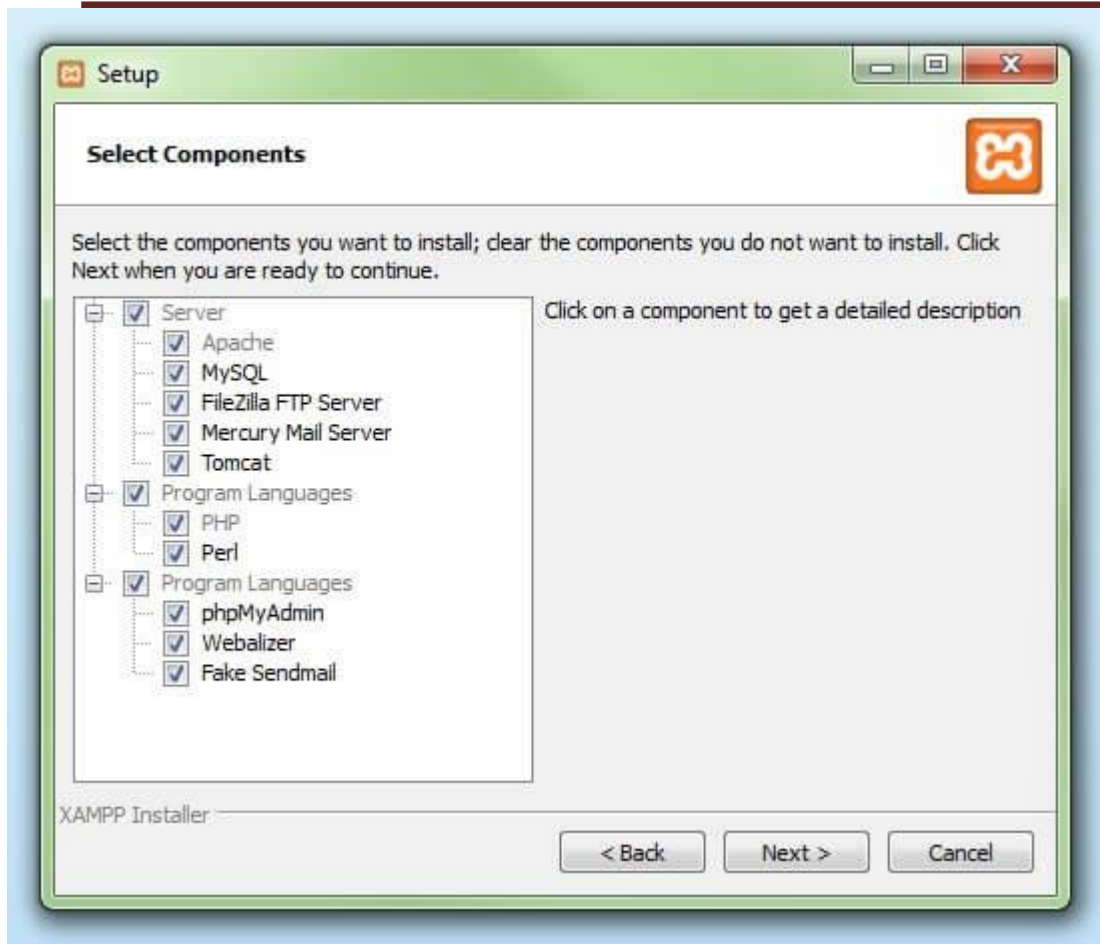
Step 5: Start the setup wizard

After you've opened the .exe file (after deactivating your antivirus program(s) and taken note of the User Account Control, the start screen of the XAMPP setup wizard should appear automatically. Click on 'Next' to configure the installation settings.



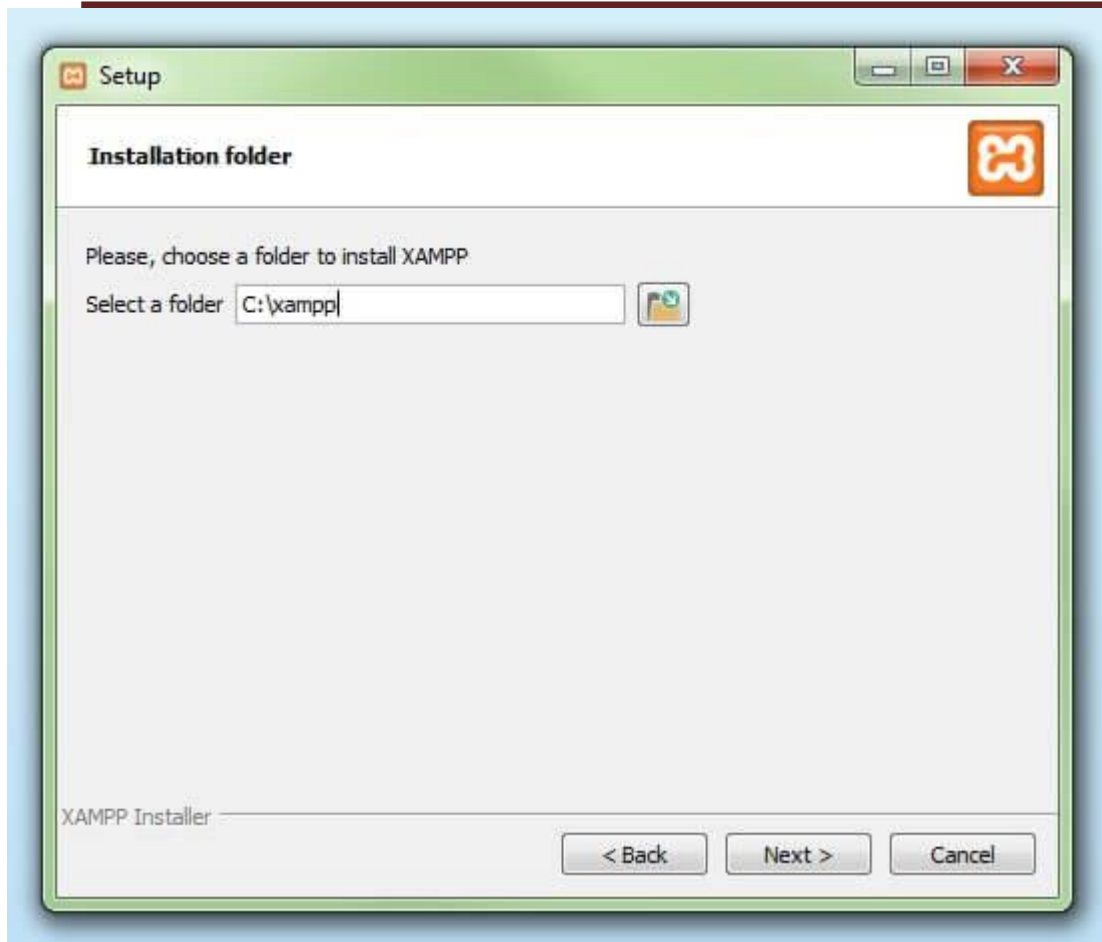
Step 6: Choose software components

Under 'Select Components', you have the option to exclude individual components of the XAMPP software bundle from the installation. But for a full local test server, we recommend you install using the standard setup and all available components. After making your choice, click 'Next'.



Step 7: Choose the installation directory

In this next step, you have the chance to choose where you'd like the XAMPP software packet to be installed. If you opt for the standard setup, then a folder with the name XAMPP will be created under C:\ for you. After you've chosen a location, click 'Next'.



Step 8: Start the installation process

Once all the aforementioned preferences have been decided, click to start the installation. The setup wizard will unpack and install the selected components and save them to the designated directory. This process can take several minutes in total. You can follow the progress of this installation by keeping an eye on the green loading bar in the middle of the screen.

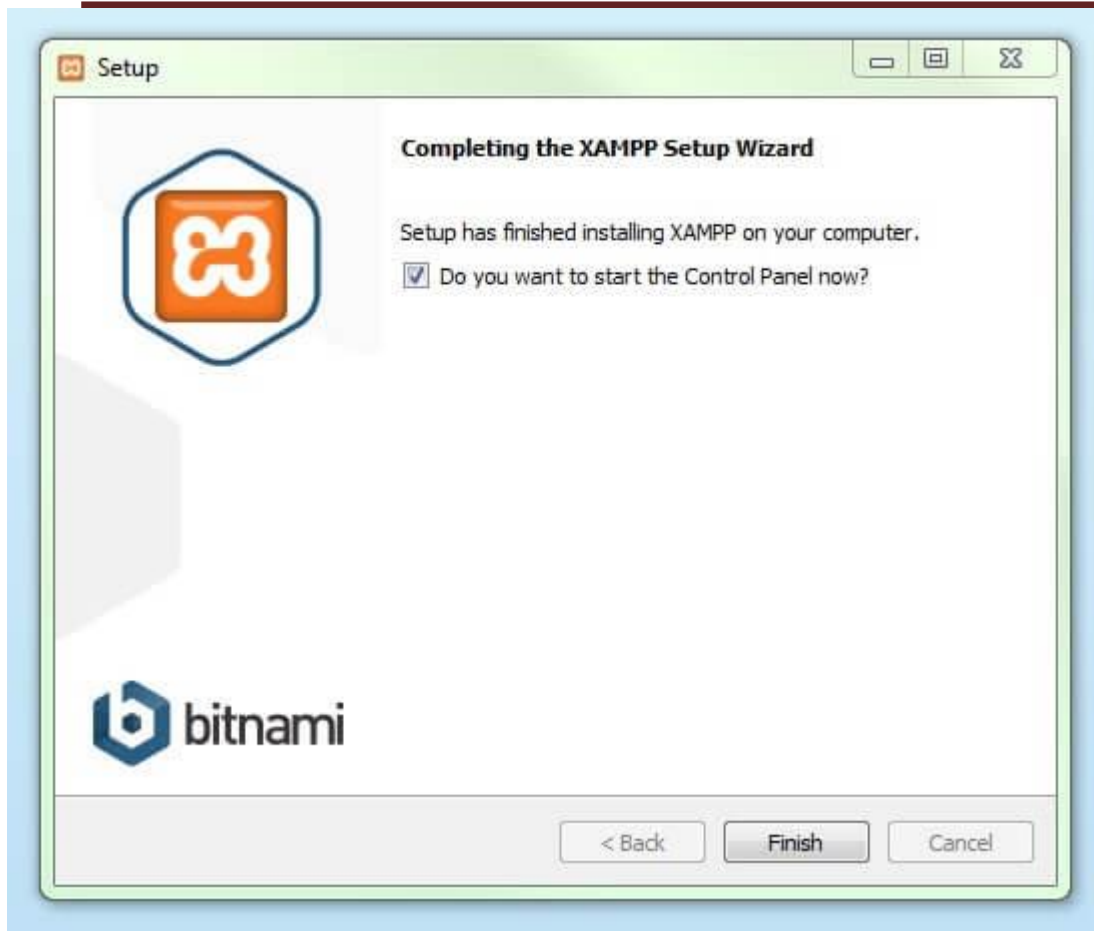


Step 9: Windows Firewall blocking

Your Firewall may interrupt the installation process to block the some components of the XAMPP. Use the corresponding check box to enable communication between the Apache server and your private network or work network. Remember that making your XAMPP server available for public networks isn't recommended.

Step 10: Complete installation

Once all the components are unpacked and installed, you can close the setup wizard by clicking on 'Finish'. Click to tick the corresponding check box and open the XAMPP Control Panel once the installation process is finished.



Starting modules

Individual modules can be started or stopped on the XAMPP Control Panel through the corresponding buttons under 'Actions'. You can see which modules have been started because their names are highlighted green under the 'Module' title

