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# 2017 COS 301 Project User Manual



Seonin David  
Joshua Moodley  
Jacques Smulders  
Jordan Daubinet  
Nicaedin Suklul



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# 1 Introduction

This is the user manual for installing and setting up the project management system for J3NS. This manual contains instructions on how to download and install the server and database. This manual will also give you a basic understanding for how to create new employees and create projects.

**This manual will currently not show you how to use the entire system because the system is still in pre-alpha**

## 2 Installation

### 2.1 Installing MongoDB

- Go to <https://www.mongodb.com/download-center#community> and download MongoDB for your respective operating system.
- Install MongoDB (It will probably be installed in ProgramFiles/Mongo)

### 2.2 Starting MongoDB

#### 2.2.1 For Windows

- Open command prompt
- Type `cd /`
- Then navigate to the bin folder in the Mongo folder (usually is `cd C:/Program Files/MongoDB/Server/3.2/bin`)
- Type `mongod`. MongoDB will now be running.
- **Since our system is in pre-alpha we do not have an importable database as we are still doing testing and the database still contains dummy data therefore the DB you will be using is empty.**

## 2.3 Installing NodeJS

- Go to <https://nodejs.org/en/download/> and download NodeJS for your respective operating system.
- Install NodeJS

## 2.4 Installing dependencies

- Go to <https://github.com/Code9Developers/Back-End> and click on the **Clone or Download** button, then click download ZIP to download our repo.
- Unzip the repo and place it in a location that you would like to keep the system.
- Open command prompt (assuming windows) and navigate to the repo until you in the folder with the package.json
- Then type *npm install*. This will install all the packages required to run the system.

## 2.5 Starting the server locally

- After all the packages are installed, type *npm run dev*. This will start the server (assuming MongoDB is still running).
- The server will now let you know that it is connected to the database and you can access the website on port 4000.
- To access the website type ***https://localhost:4000***

## 2.6 Starting the server online

- Visit: Code 9 <https://code9devs.me/>
- Follow our virtual demo: Virtual Demo Doc.pdf.

## 3 Using the System

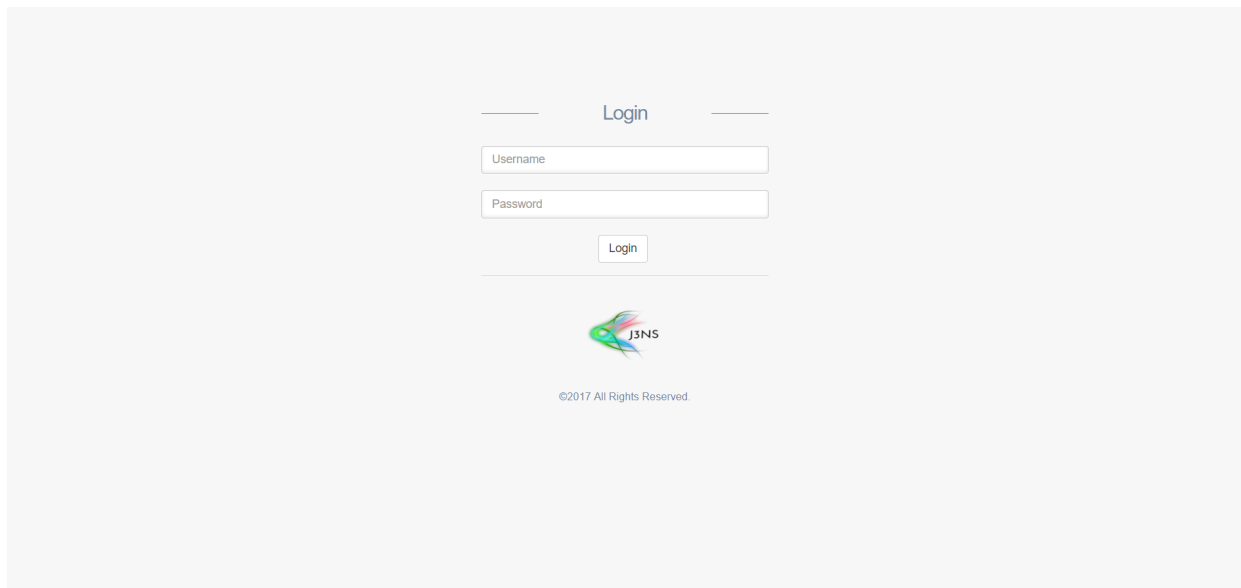
The system is currently still in development but the core functionality can still be used. **Note that the routing authentication has been turned off, this is due to testing purposes but the functionality is there**

### 3.1 Login page

1. Request type: POST
2. URL: <https://code9devs.me/login> or <https://code9devs.me/>

This is the login page where a manager, administrator or employee can login and will be routed to the relevant page. When the respective user logs in it will route to the respective page depending on that user's role.

1. Project Manager: Project creation page
2. Administrator: All employees page
3. Employee: User dashboard page



## 3.2 Admin pages(If an administrator logs in)

### 3.2.1 Admin Page

1. Request type: GET
2. URL: <https://code9devs.me/admin>

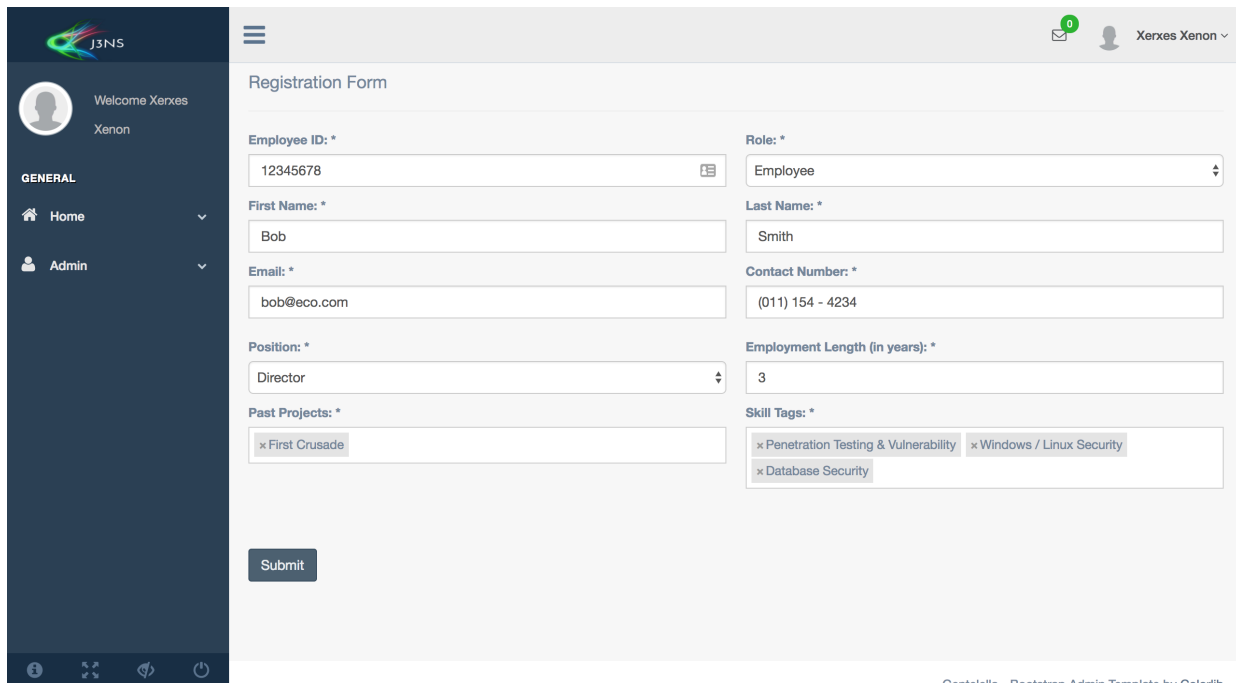
#### Description

On this page an Admin user will be allowed to create a new employee with all the relevant information. Once submit button is clicked a POST request will be sent to the server, the employee will then be stored in the users collection in the database.

When you click on the submit button it will create the project and then route the logged in user to the employees page which will display all employees on the J3NS system.

#### Functions

On this page when the submit button is clicked it will send a request to store all the information in the page. The employee that is created will then be stored in the database and now can be assigned to a project. After that the page will then route to the employees page(<https://code9devs.me/employees>) which will display all employees that are registered.



The screenshot shows the J3NS Admin interface. On the left is a dark sidebar with the J3NS logo and a user profile for 'Xenon'. The main content area is titled 'Registration Form' and contains several input fields: 'Employee ID' (12345678), 'First Name' (Bob), 'Email' (bob@eco.com), 'Position' (Director), 'Role' (Employee), 'Last Name' (Smith), 'Contact Number' ((011) 154 - 4234), 'Employment Length (in years)' (3), and 'Skill Tags' (Penetration Testing & Vulnerability, Windows / Linux Security, Database Security). A 'Submit' button is at the bottom left of the form. The top right of the page shows a notification icon with '0' and the user name 'Xenon Xenon'.

### 3.2.2 Employees Page

1. Request type: GET
2. URL: <https://code9devs.me/employees>

#### Description

This page displays all the registered employees on the system.

#### Functions

When the page loads it will call a function to get all the employee that are currently stored on the system. The administrator can click the view button and it will then route to the employees profile page where all the employees information can be seen.

**All Employees**

View of all employees currently registered on the project management system

| # | Name             | Email                      | Position         | Employment Length | Options                                     |
|---|------------------|----------------------------|------------------|-------------------|---|
| # | Rupert aldrige   | Rupert.aldrige@gmail.com   | Junior Analyst 2 | 4                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Elane alexander  | Elane.alexander@gmail.com  | Junior Analyst 1 | 4                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Johnathan alford | Johnathan.alford@gmail.com | Senior Analyst   | 2                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Anisha algate    | Anisha.algate@gmail.com    | Analyst          | 3                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Velia alger      | Velia.alger@gmail.com      | Senior Analyst   | 3                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Pamella alison   | Pamella.alison@gmail.com   | Senior Analyst   | 4                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Linn alkrington  | Linn.alkrington@gmail.com  | Analyst          | 1                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Fernanda allan   | Fernanda.allan@gmail.com   | Junior Analyst 1 | 3                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Evia allanby     | Evia.allanby@gmail.com     | Analyst          | 4                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Verda allard     | Verda.allard@gmail.com     | Junior Analyst 2 | 4                 | <a href="#">View</a> <a href="#">Delete</a> |
| # | Anton allason    | Anton.allason@gmail.com    | Junior Analyst 2 | 1                 | <a href="#">View</a> <a href="#">Delete</a> |

☆ Code 9 ☁️ To: code9devs@gmail.com... 2017/10/12, 12:29

Welcome Jake Paul  
 User name is: **88888888**  
 Your password is: **hOoa**

### 3.2.3 Training Page

1. Request type: GET
2. URL: <https://code9devs.me/training>

#### Description

Admin creates training events for employees so that employees can gain project experience and advance their skills.

#### Functions

Admin will create a training event where they have to enter the trainers details, the start and end date of the training event and the employees. Once this is created, all the relevant employees will be notified.

**Training**

Trainer's Name: \*

Trainer's Email: \*

Trainer's Phone Number: \*

Start Date: \*

End Date: \*

**All Employees**

Show  entries Search:

| <input type="checkbox"/> | Name      | Surname | Position         | Employment Length | Email                     |
|--------------------------|-----------|---------|------------------|-------------------|---------------------------|
| <input type="checkbox"/> | Adalberto | askin   | Junior Analyst 2 | 3                 | Adalberto.askin@gmail.com |
| <input type="checkbox"/> | Adam      | batt    | Junior Analyst 1 | 4                 | Adam.batt@gmail.com       |
| <input type="checkbox"/> | Adria     | benham  | Junior Analyst 1 | 2                 | Adria.benham@gmail.com    |
| <input type="checkbox"/> | Adrianna  | allix   | Analyst          | 3                 | Adrianna.allix@gmail.com  |
| <input type="checkbox"/> | Aida      | belcher | Senior Analyst   | 2                 | Aida.belcher@gmail.com    |
| <input type="checkbox"/> | Akiko     | battle  | Junior Analyst 2 | 2                 | Akiko.battle@gmail.com    |
| <input type="checkbox"/> | Alesha    | bener   | Junior Analyst 1 | 2                 | Alesha.bener@gmail.com    |

★ **Code 9** ☁️ ⌵ Dear Jake Paul please note you have training from... 2017/10/12, 12:30

Dear **Jake Paul** please note you have training from the **Fri Oct 13 2017 00:00:00 GMT+0000 (UTC)** to the **Sun Oct 15 2017 00:00:00 GMT+0000 (UTC)**.  
If you have any questions please contact **Grace**: [code9devs@gmail.com](mailto:code9devs@gmail.com) or [\(098\) 765 - 4354](tel:(098)765-4354)

### 3.3 Manager pages (If a project manager logs in)

#### 3.3.1 Project Creation Page

1. Request type: GET
2. URL: [https://code9devs.me/project\\_creation](https://code9devs.me/project_creation)


##### Description

On this page a manager can create the project. The manager will be required to enter all information relevant to the project. The manager will also have to select the number of employees that is required for the project. When the allocate employees button is clicked, the algorithm will then return the best suited employees for the project after taking many factors into account. The manager can then choose to remove employees from the project but this will have to go through the chain of command to get approved. After all the information is entered and the employees are selected. A POST request will then be sent to the server to store all the information in the database. After all the information is store the user will then be routed to the project view page where he/she can view all information regarding the project as well as insert information regarding the project.

##### Functions

On this page when the manager clicks on the assign employees button a request for employees will be sent to the server. The server will then call the resource allocation algorithm to get the best suited employees and then return and display in the table.





Welcome Sargon David

GENERAL

Home

Admin

## New Project

Create a new project

Project Name: \*

Test

Project Date: \*

Start Date: \*

yyyy/mm/dd

End Date: \*

yyyy/mm/dd

Project Description (minimum of 20 characters, max of 150) : \*

Test project for creation

Skill Tags: \*

× Penetration Testing and Vulnerability

× Scanning (Nessus and Qualys)

× Windows / Linux Security

× Database Security

× Strategic Management

× Regulatory Compliance

× Risk Management

Employee Allocation: \*

No. Assistant Manager: \*

0

1

No. Analyst: \*

0

2

No. Supervisor: \*

0

2

No. Junior Analyst 1: \*

0

1

No. Senior Analyst: \*

0

3

No. Junior Analyst 2: \*

0

1

Allocate Employees

### Allocated Employees

Below are the pre-selected employees that would best fit this project. Please select the employees you wish to replace and provide a reason for the replacement.

Show 10 entries

Search:

| ×                        | Name    | Surname          | Position       | Employment Length | Skill                                 |
|--------------------------|---------|------------------|----------------|-------------------|---------------------------------------|
| <input type="checkbox"/> | Chanda  | bayer            | Senior Analyst | 4                 | Risk Management                       |
| <input type="checkbox"/> | Cliff   | bennett          | Senior Analyst | 2                 | Penetration Testing and Vulnerability |
| <input type="checkbox"/> | Nikita  | andriesen        | Senior Analyst | 4                 | Scanning (Nessus and Qualys)          |
| <input type="checkbox"/> | Roma    | bell or hamilton | Senior Analyst | 3                 | Strategic Management                  |
| <input type="checkbox"/> | Rosalee | barton           | Senior Analyst | 4                 | Windows / Linux Security              |
| <input type="checkbox"/> | Solomon | bellarmy         | Senior Analyst | 4                 | Regulatory Compliance                 |
| <input type="checkbox"/> | Vanita  | beck             | Analyst        | 4                 | Database Security                     |

Showing 1 to 7 of 7 entries

Previous

1

Next

Get Replacements

Project Owner: \*

Project Owner Email: \*

Contact Number: \*

☆ Code 9 ☁️ ✓ To: code9devs@gmail.co... 2017/09/26, 16:26

**Ptolemy Smith** you have been assigned to the **P1** project.

Code 9

Page 9

### 3.3.2 Projects Page

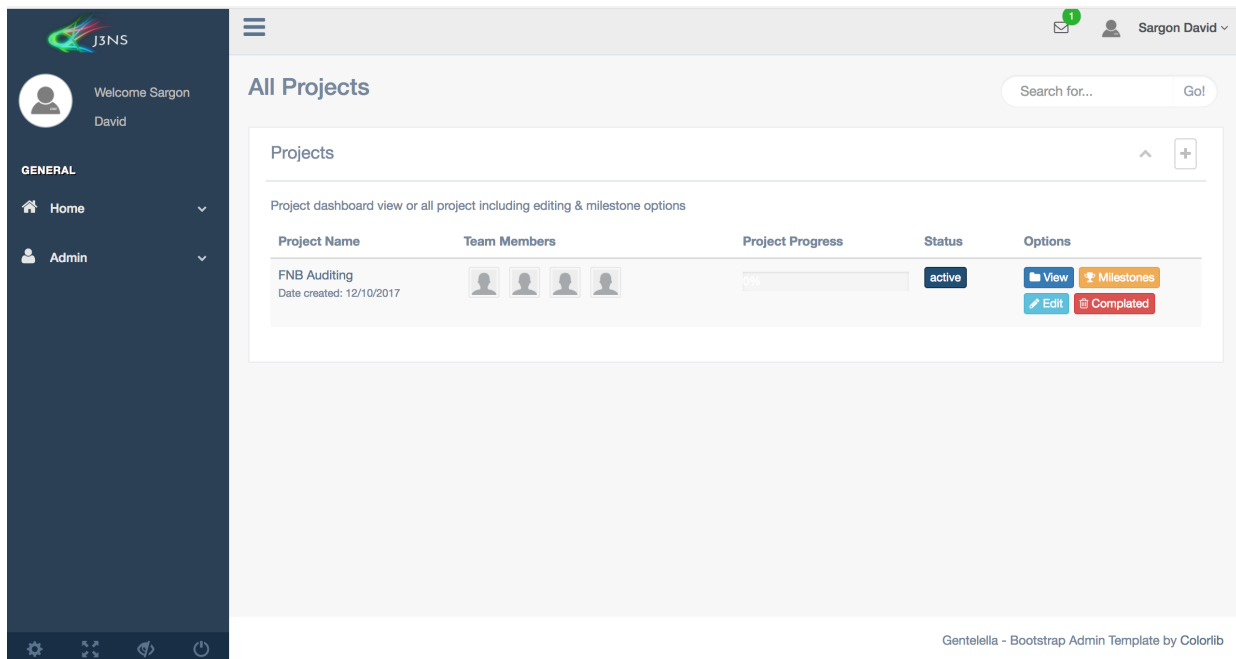
1. Request type: GET
2. URL: `https://code9devs.me/projects`

#### Description

This page displays all the projects that are currently active. From this page a project manager will be able to view the active projects as well as some brief details about the project such as date created and project start date. At the far left of the page there are four buttons, each button routes to the page to do the functionality described by the button.

#### Functions

1. **Click View Button**- When this button is clicked it will send a GET request to the server to display the project view page of the project that was clicked (It sends the project ID in the get request so it only displays the appropriate project.)
2. **Click Milestones Button**- This button will route the manager to the milestones page where the manager can add milestones to the project.
3. **Click Edit Button**- This page will route the manager to the project edit page where the manager can edit parts of the project.



### 3.3.3 Projects View

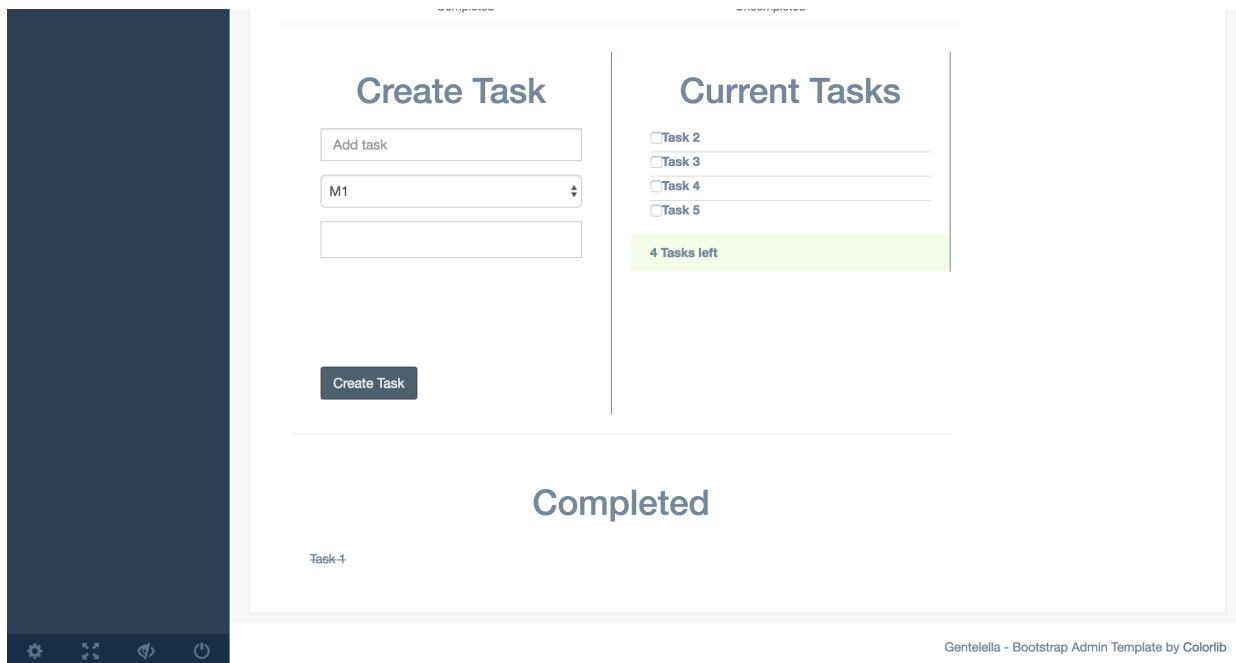
1. Request type: GET
2. URL: [https://code9devs.me/project\\_detail](https://code9devs.me/project_detail)

#### Description

This page displays all information about the project. The project manager can all create tasks at the bottom of the page. A manager can create a task, assign it to a milestone, and also assign it to multiple employees to finish. When a task is created, an employee will get notified. When the task is complete, the manager can check it, and it will move to the complete list.

#### Functions

1. Allow manager to create task. This request will be sent to the server where the task and all relevant details associated with the task will get stored in the database, after that is done, notifications will be created, and relevant parties will be notified.



### 3.3.4 Project Review

1. Request type: GET
2. URL: [https://code9devs.me/project\\_review](https://code9devs.me/project_review)

#### Description

This page requires the manager to rate the project as well as rating each employee who was involved in the project.

#### Functions

1. Allow manager to give the project an overall rating on a scale of 1 to 10 and rate each employee who was involved on a scale of 1 to 10. All the details will be stored in a database.

### 3.3.5 Projects Edit Page

1. Request type: GET
2. URL: [https://code9devs.me/project\\_edit](https://code9devs.me/project_edit)

#### Description

This page will allow the manager to edit the current projects deadline if needed and also remove and reassign employees if ever needed.

#### Functions

1. Request will be send to server that will update the project end date on the database.
2. If an employee is selected to be removed, another employee of equal skill will be found.

☆ Code 9 ☁️ ▼ To: code9devs@gmail.com... 2017/10/12, 13:52 💬 ↶ ↷ ↵ ▼

**Sargon David** requests a change of employee for the "**Green**" project.

### 3.3.6 Milestones Page

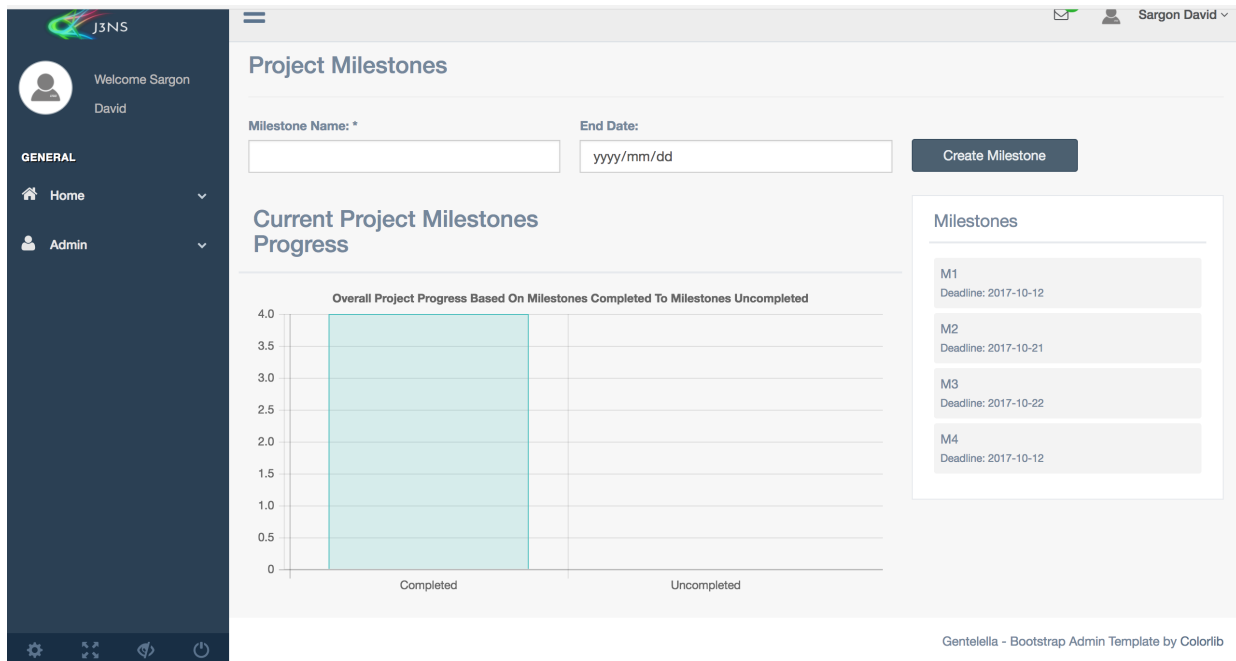
1. Request type: GET
2. URL: [https://code9devs.me/project\\_milestone](https://code9devs.me/project_milestone)

#### Description

This page will allow a project manager to create a new milestone for the project and give it the deadline date.

#### Functions

1. Request will be sent to server to store new milestone in database
2. Now manager can assign tasks and employees to that milestone.



## 3.4 Employee pages (If an employee logs in)

### 3.4.1 Employee Profile

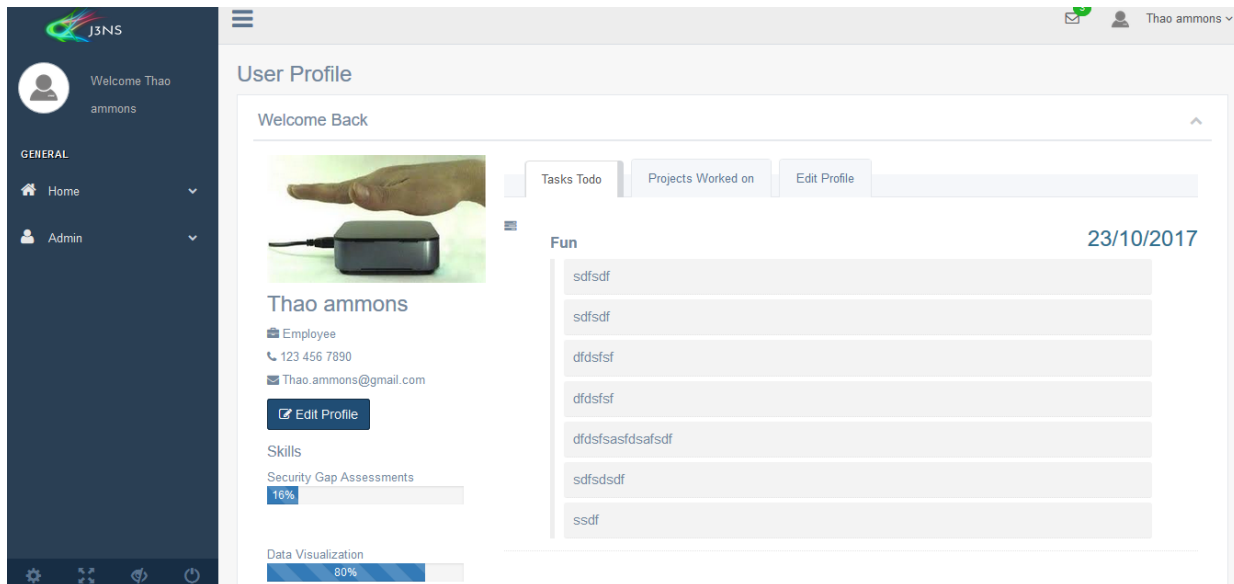
1. Request type: GET
2. URL: [https://code9devs.me/employee\\_profile](https://code9devs.me/employee_profile)

#### Description

This page displays all the tasks that the employee currently has, the projects the employee has worked on and it allows an employee to edit their profile. It also shows the skills of the employee.

## Functions

1. Displays tasks of the employee as well as the skills.
2. Allows user to edit their profile.
3. Shows the projects that the employee has worked on
4. Shows the employees details.



### 3.4.2 Employee dashboard

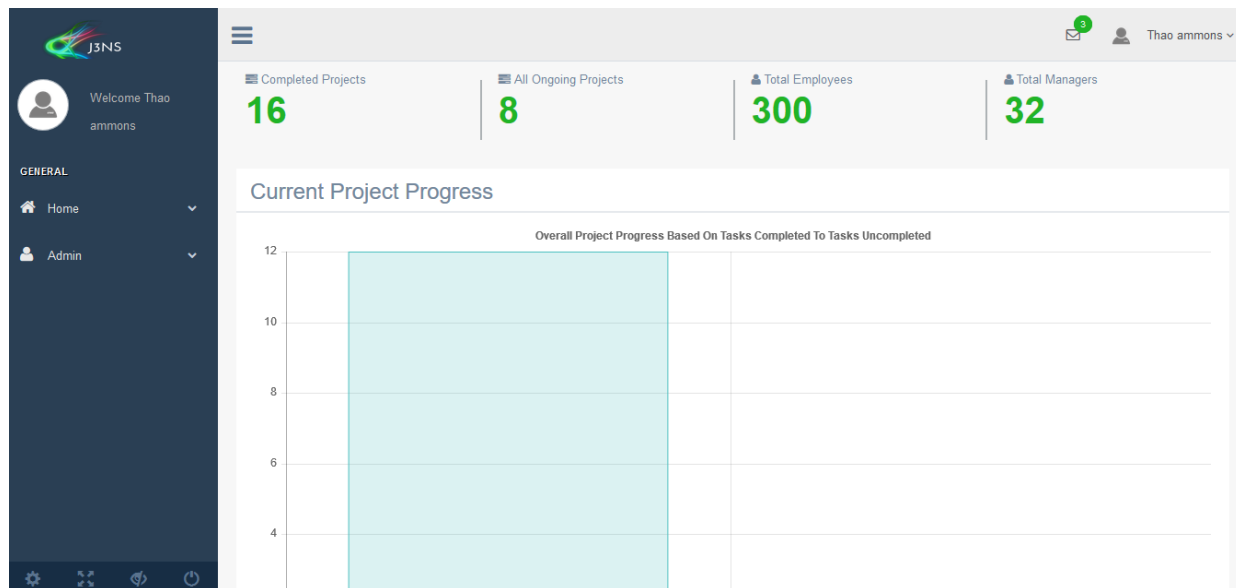
1. Request type: GET
2. URL: [https://code9devs.me/user\\_dashboard](https://code9devs.me/user_dashboard)

## Description

This page displays a brief overview of the employee's projects and also some analytic data regarding the current employees project.

## Functions

1. GET request to get the project data



### 3.4.3 Employee calendar page

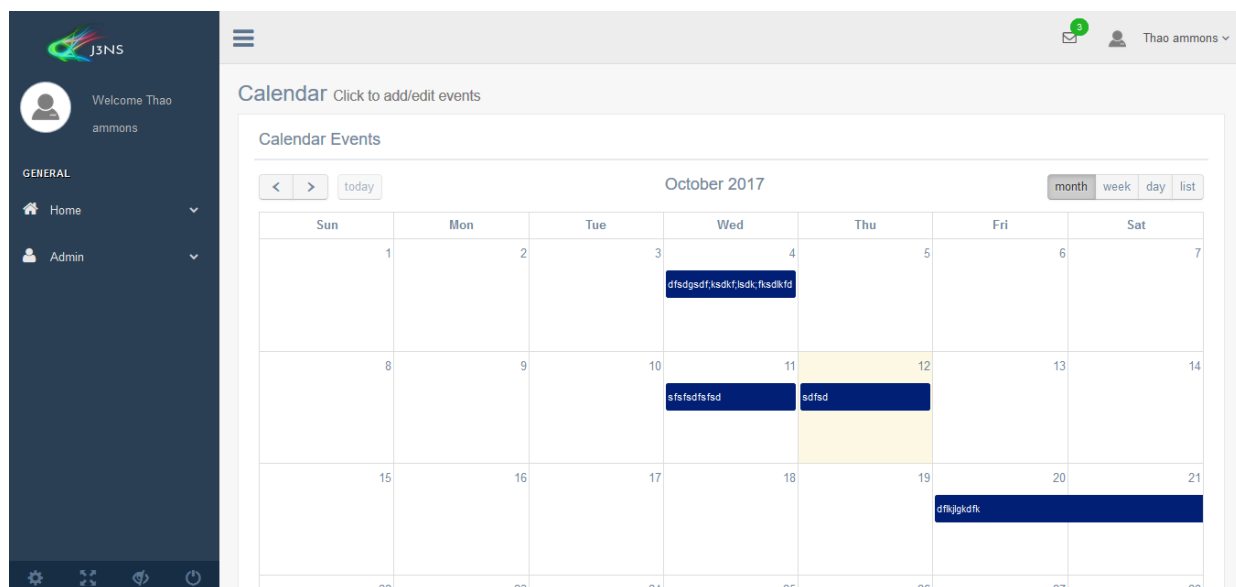
1. Request type: GET
2. URL: <https://code9devs.me/calendar>

#### Description

Will display all the events the employee has. Project events and personal events.

#### Functions

1. The employee can also click on a day and create an event (as long as that event does not conflict with the project.)



## 3.5 Director pages (If a Director logs in)

### 3.5.1 Director dashboard

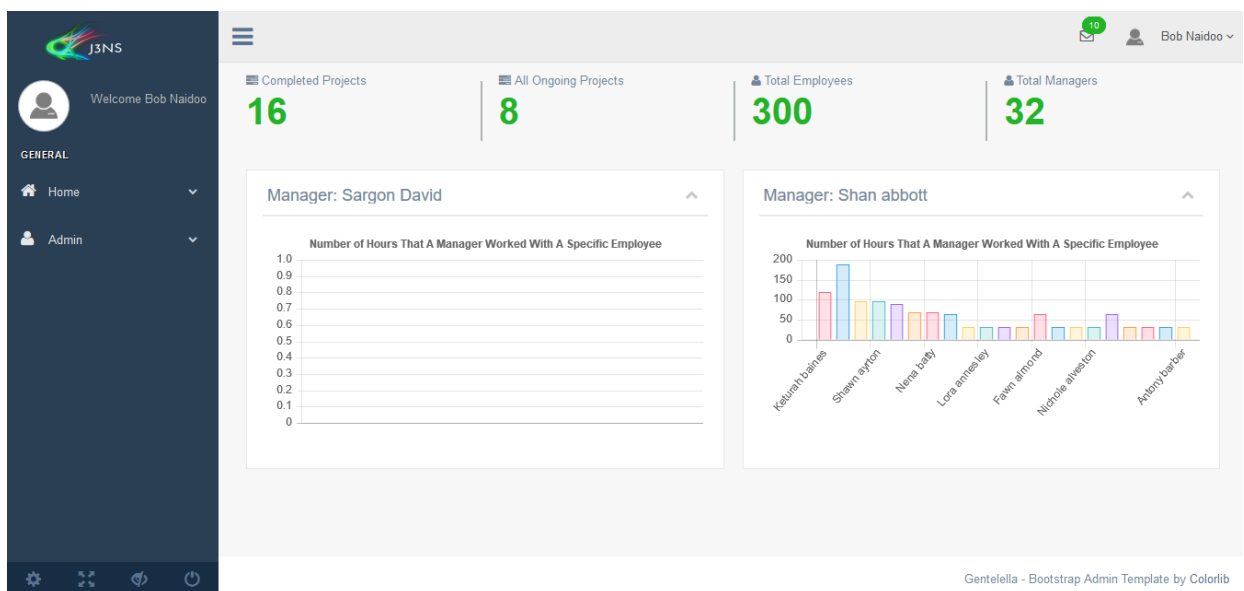
1. Request type: GET
2. URL: [https://code9devs.me/user\\_dashboard](https://code9devs.me/user_dashboard)

#### Description

This page displays a brief overview of the director's projects and also some analytic data regarding the current director's project. Each project manager will also have graphs of the total number of hours that the project manager worked with a specific employee.

#### Functions

1. GET request to get the project data



### 3.5.2 Director calendar page

1. Request type: GET
2. URL: <https://code9devs.me/calendar>

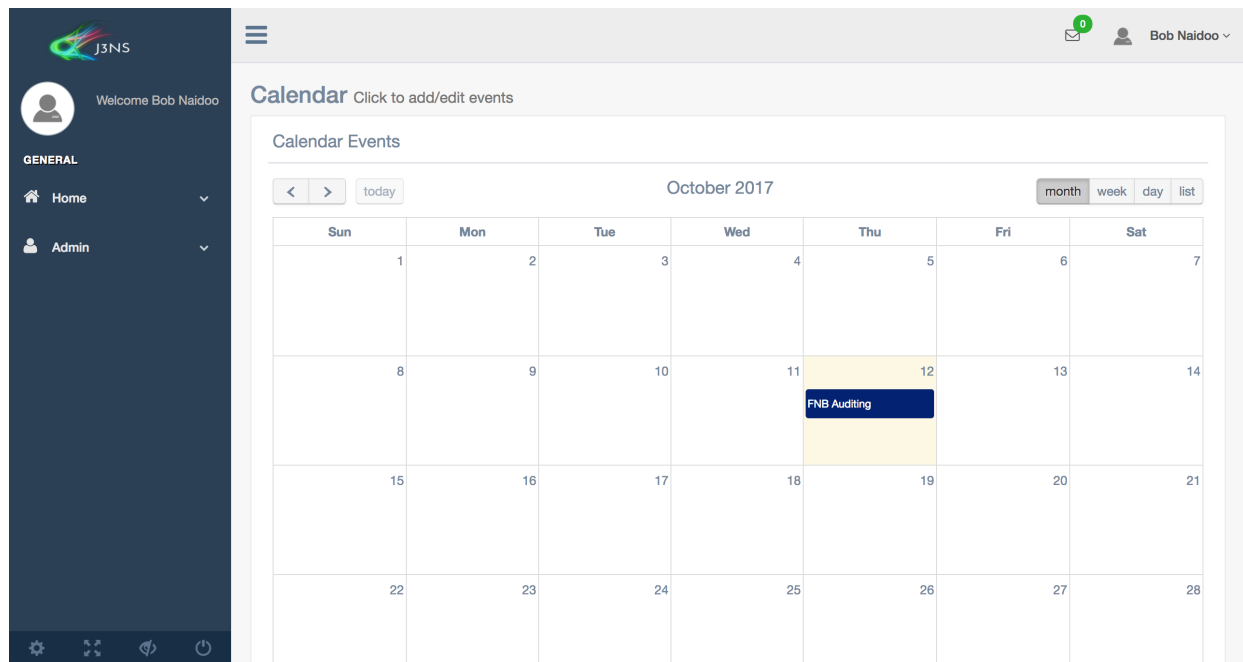
#### Description

This page will display all the events the director has such as project events and personal events.

#### Functions

1. The director can also click on a day and create an event(as long as that event does not conflict with the project.)





### 3.5.3 Projects view page

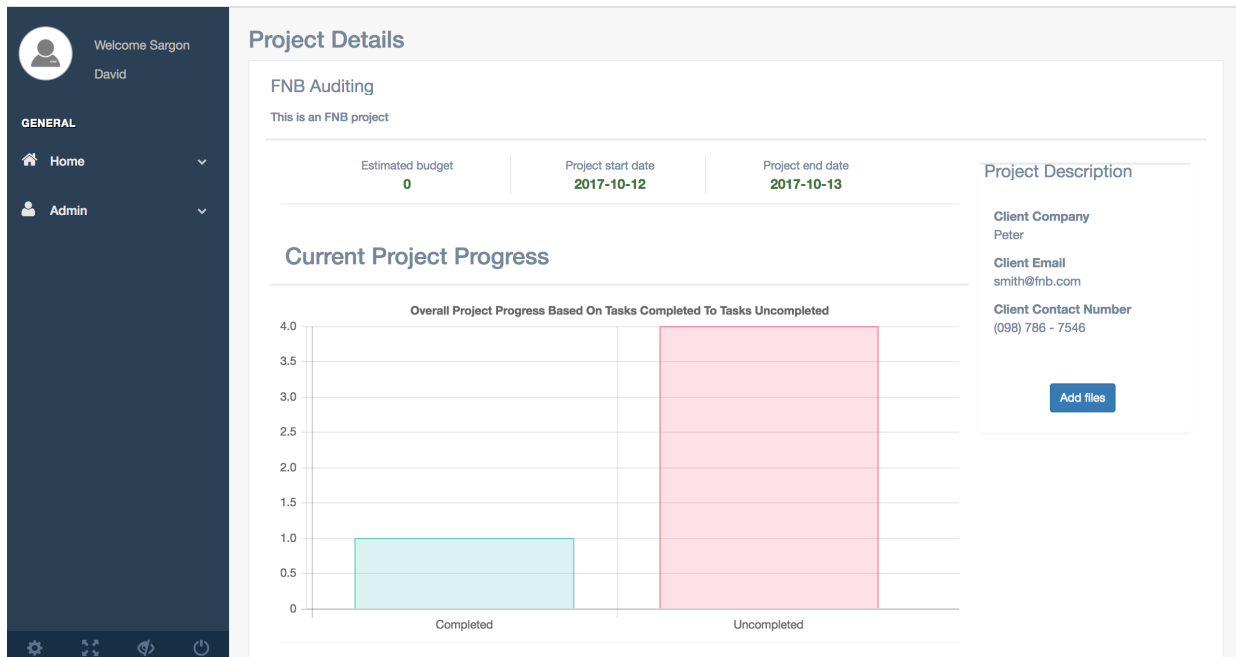
1. Request type: GET
2. URL: [https://code9devs.me/projects\\_view](https://code9devs.me/projects_view)

#### Description

This page will display the overall details of a project as well as a graph of the task to be completed and tasks that must still be completed.

#### Functions

Displays all the details of the project as well a graph of the tasks that have been completed as well as the tasks to be completed.



### 3.5.4 Director approvals page

1. Request type: GET
2. URL: [https://code9devs.me/director\\_approvals](https://code9devs.me/director_approvals)

#### Description

Displays all projects that need approval for replacement of employees.

#### Functions

Displays all projects that need approvals. The director can click the view button in order to view the project that needs an approval.

