# Project Portfolio Document

**Project Title:** MEAN Stack Book Management System Deployment on AWS

**Date Completed:** 02/09/2025

## Project Overview:

This project involved the end-to-end installation, configuration, and deployment of a MEAN stack application on an AWS EC2 instance. The core deliverable was a functional Book Register web form capable of creating, reading, and deleting entries from a MongoDB database.

## Technical Stack:

* Frontend: Angular.js, HTML, CSS
* Backend: Node.js, Express.js
* Database: MongoDB
* Infrastructure: AWS EC2 (Ubuntu 22.04 LTS)
* Other Tools: Git, npm

## Key Responsibilities & Achievements:

* Provisioned and configured a virtual server on AWS EC2.
* Secured the instance by configuring inbound rules in the security group.
* Installed and verified all necessary MEAN stack components (Node.js, MongoDB, Express, Angular).
* Developed the server-side logic with Express and Mongoose to handle API requests.
* Built a client-side application with Angular.js for user interaction.
* Troubleshooted and resolved runtime errors related to dependencies and network configuration.
* Successfully deployed the application and validated its functionality through a web browser.

## Learning Outcomes:

* Gained practical experience in cloud server management on AWS.
* Strengthened understanding of full-stack JavaScript development.
* Enhanced skills in Linux environment navigation and package management.
* Learned to manage application state between client, server, and database.

## Project Links:

LinkedIn Post:

https://www.linkedin.com/posts/sally-m-09546a245\_meanstack-aws-ec2-activity-7368673711920545795-TclM?utm\_source=share&utm\_medium=member\_desktop&rcm=ACoAADzCKfEBZK3LPTQ5D0pi879scjlAX0g4FTk

GitHub Repository: [StegHub\_DevOps/project3 at main · 123Origami/StegHub\_DevOps](https://github.com/123Origami/StegHub_DevOps/tree/main/project3)