Website

Create By: Ayham Zaid
Project for Orange Academy

Contents

Abstract

Tech News is a site specialized in technology news, it is directed to all people interested in technology and the latest developments and the most important new updates, the site will consist of several pages and will contain a content management system as well and will be built on the framework of Laravel. In this site, we used the Agile methodology and took several steps (chapter 1). I identified the challenges and the solutions. drew up the project construction timeline. Then, at (chapter 2), we collected the requirements for building the site and were collected by a questionnaire and then we identified the functional and non-functional requirements. Then we use all requirements to build use case and sequence diagram, and in (chapter 3) and took Data and we have created data then founded databases and tables of data and designed Screen to the site and we started implementing the project and used the language of PHP to build the site at (chapter 4) identified future business and the most important results that got it.

Chapter 1: Introduction

1.1 Introduction

Tech News is a site specialized in technology news, it is directed to all people interested in technology and the latest developments and the most important new updates.

1.2 System Goals

The goal of building the site is to:

1. make everyone interested in technology
2. able to access the latest news with ease and speed
3. save time instead of entering other news sites and searching for a long time on technology news, which may be greatly summarized and not accurate.

1.3 Feasibility Study

1.3.1 Challenges

1. Few people interested for Technology.
2. A lot of site tells fake news.

1.3.2 Proposed Methods

1. Make people more interested to read Technology New.
2. Get real News.
3. Make Technology More fun

1.4 The Method Adopted in The Design of The System

1. Object-oriented design includes two main stages, namely, system.
2. System Design: System Design: In this stage, the complete architecture of the desired system is designed. The system is conceived as a set of interacting subsystems that in turn is composed of a hierarchy of interacting objects, grouped into classes.
3. System design is done according to both the system analysis model and the proposed system architecture.

1.5 Gantt Chart

Table 1 Tasks vs Time

Task	Duration	Start Date	Finish Date
Introduction problem study, general objectives, description of the current system, proposed system	2d	1/12/2019	3/12/2019
Analysis gather information (System Requirements, System Use Case Diagram)	3d	4/12/2019	07/12/2019
Screen Design (define the layers)	4d	08/12/2019	12/12/2019
Data Base Design: Normalization, ERD, database tables	4d	13/12/2019	17/12/2019
Implement code and solve the problem (write code)	20d	18/12/2019	8/01/2020
Testing [white & black] Box	10d	8/01/2020	18/01/2020

1.5.1 Analyze & Requirement

In the first week I analyze and gather information to gather requirements, starting date at 1/12/2019, and we end the task at 07/12/2019, with duration 3 days.

1.5.2 Screen Design and Data Base

1. In the second week select the date information and GUI
    a. Class diagram
    b. Data Base Table design and Normalization
    c. Mock up design
2. Starting date at 4/12/2019, end this task at 12/12/2019, with duration 8 days.

1.5.4 Implement code

Laravel with ,MySQL , with duration from start's at 18/12/2019 to 8/01/2020.

1.5.5 Testing

Test the program [white Box & black Box], we starting to but our system in testing mode with duration from 8/01/2020 to 15/01/2020.

1.5.6 Graph

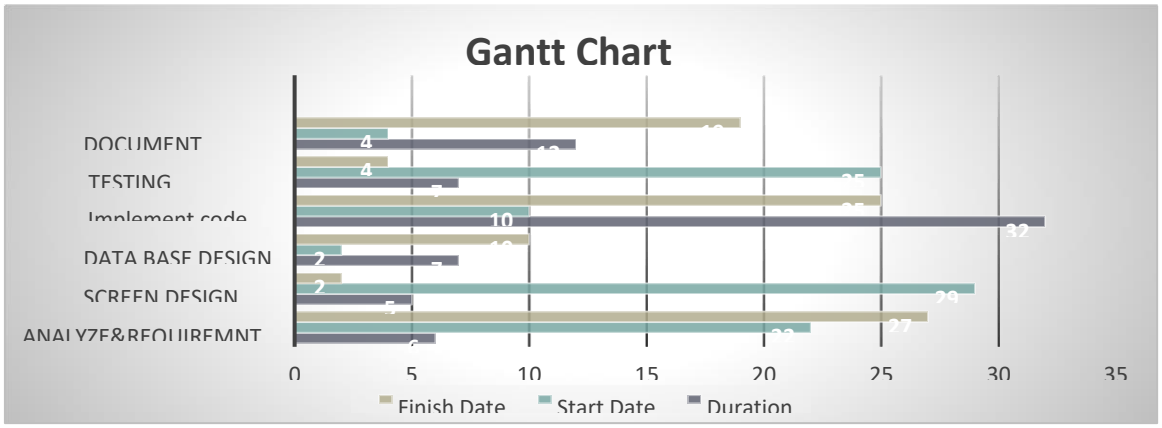


Figure 1 Time Line of the Project

Chapter 2: Requirement

2.1 Analysis

Requirements analysis, also called requirements engineering, is the process of determining user expectations for a new or modified product. These features, called requirements, must be quantifiable, relevant and detailed. In software engineering, such requirements are often called functional specifications. Requirements analysis is an important aspect of project management.

Requirements analysis involves frequent communication with system users to determine specific feature expectations, resolution of conflict or ambiguity in requirements as demanded by the various users or groups of users, avoidance of feature creep and documentation of all aspects of the project development process from start to finish. Energy should be directed towards ensuring that the final system or product conforms to client needs rather than attempting to mold user expectations to fit the requirements.

2.1.1 User Requirement

This field of indoor and outdoor maintenance and all services with just one click with entering the problem (The main features:)

A-Front Web Site:

1. Login and register page for new user or author
2. Home page to show all news
3. Category Page Have all type of news
4. Details News page to show news in details

B-Back Web site:

1. Admin page to control of web site
2. Permission page
3. Roles Page
4. Authors Page
5. Category's Page
6. Posts Page
7. Admin Sitting Page

2.2.1 Functional requirement

1. log in / register page: make admin and blogger, editors' access to Web Site.
2. Dashboard page to control of web site
3. Home page to show all category and posts

4. List page to show specific category
5. Details page to details news
6. Author's Page to show all article's posts by Authors

2.2.2 Non-Functional Requirement

1. External Requirement

    a. The web site has Admin to check and publish the News.
    b. The blogger and Editor can add posts and update posts.
    c. The Admin has permission to delete News

2. Organizational Requirement

    a. Require any OS (such as Windows (XP, 7, 8.1, 10) Linux and Mac). Etc.
    b. Web browser (chrome, Firefox, Opera, Explorer).
    c. Connected to the Internet.
    d. To Program Web pages we use a Laravel and connect them with database MySQL, Web pages CSS, Html, bootstrap and use protected PHP md5.

3. Product Requirement

    a. Site speed is linked to the speed Net Lowes Third generation network limit.
    b. duration of access be the Internet speed of 10 seconds to a minute.
    c. needs for memory by device if it is a computer 512 MB minimum, phone 265 MB.
    d. no need for storage capacity, it's only needs Internet connection and mobile phone or a computer.
    e. user protection system md5.
    f. the failure rate is very low if maintenance team failed righteousness immediately.
    g. The system must be able to work at any time through its design as the site can access all connected on the Web.
    h. The system must have High speed to be able to perform the tasks required of it and that use software to build a high quality and efficient: Laravel 5.8, MySQL Server.
    i. flexibility and easily add new user and determine his powers, Easy adjustment on current user's privileges.

2.2.3 System requirement

1. The web site must be compatible with pc's and mobiles devises.

   - To achieve all these functions a computer or mobile devise must be available and connected to the internet.
   - The version or model of the device does not matter, but defiantly needs at least a web browser.

2. Programming languages used

   - HTML (Hyper Text Markup Language) is the most basic building block of the Web.
   - CSS is a language that describes the style of an HTML document.
   - JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions.
   - PHP is a popular general-purpose scripting language that is especially suited to web.
   - Laravel is a free, open-source PHP web framework, created by Taylor Otwell and intended for the development of web applications.
   - MySQL is an open-source relational database management system (RDBMS).
   - PDO_MYSQL is a driver that implements the PHP Data Objects (PDO) interface to enable access from PHP to MySQL databases.

2.3 Use Case Description

1. Actors:

    a. Human actors: Admin, Editors, Bloggers.

Use case Number	**UC - 01**
Use case name	Browsing
Participation actor	1. User 2. Admin 3. Bloggers 4. Editors
Pre-condition	Internet connection
Flow of events	1. Open web site 2. Browse the web site
Post-condition	Retrieving, presenting and traversing information resources
Quality Requirements	Speed site browsing

Table 2 UC-01 Browsing

Use case Number	**UC - 02**
Use case name	sign up for Users
Participation actor	1. Bloggers, Editors
Pre-condition	Internet connection, e-mail or phone number
Flow of events	1. open website 2. click on sign up 3. insert information 4. check information 5. send to server
Post-condition	user confirmation
Quality Requirements	1. If the user entered an incorrect username and password. 2. Show error messages: sign up fails.

Table 3 UC-02 sign up for Client

Use case Number	**UC - 03**
Use case name	Add post
Participation actor	1. Admin 2. Bloggers 3. Editors
Pre-condition	Permission roles access
Flow of events	1. Go to dashboard 2. Click on posts 3. Click on Create posts 4. Insert all data
Post-condition	Admin publish posts
Quality Requirements	1. Just admin has all permission

Table 4 UC-03 sign up for Technician

2.3.1 Use Case Diagram

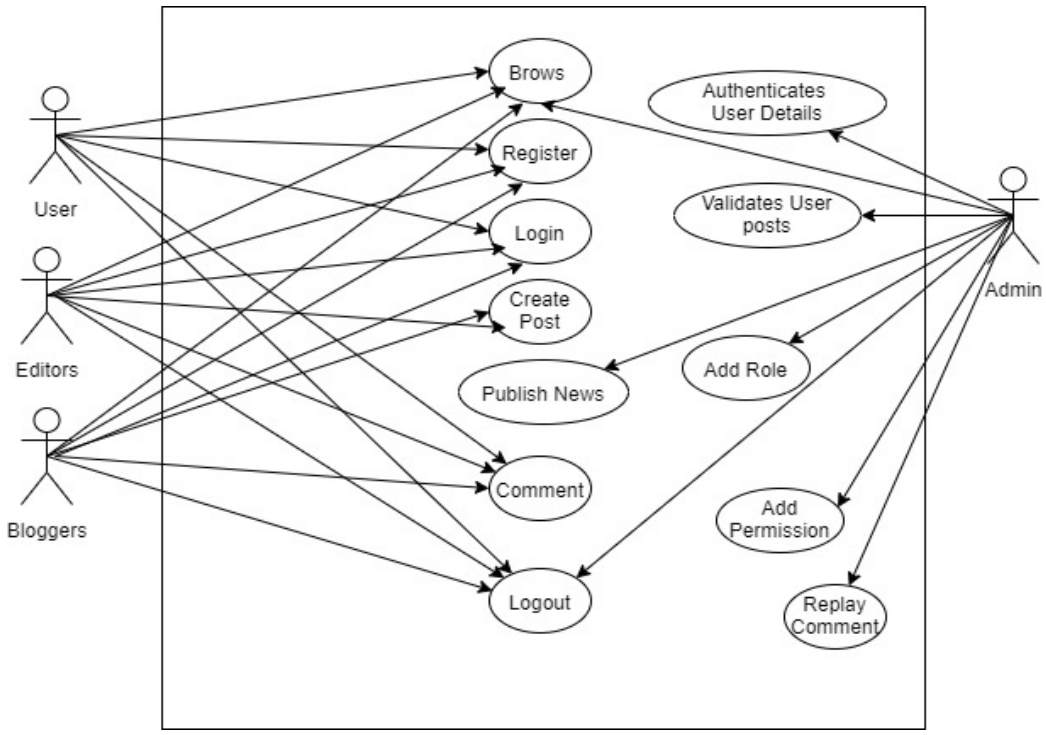


Figure 2 Use Case Diagram

2.3.2 Activity Diagram

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. In the Unified Modeling Language, activity diagrams are intended to model both computational and organizational processes. Activity diagrams show the overall flow of control.

1. Activity Diagram for Browsing

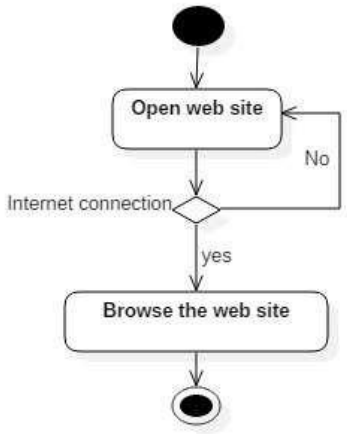


Figure 3 Activity Diagram Browsing

2. Activity Diagram for sign up for Client

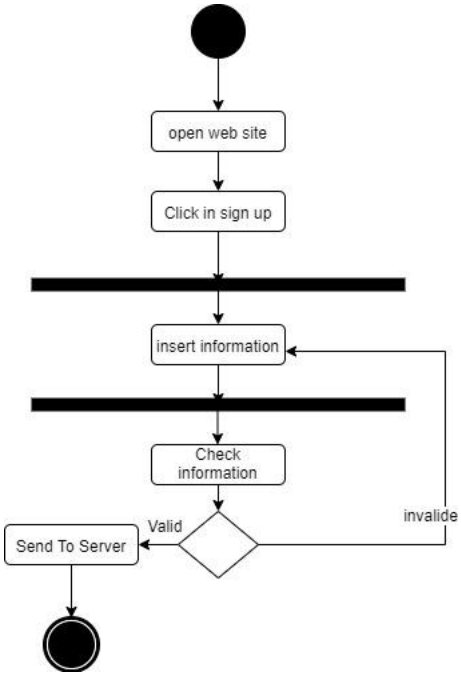


Figure 4 Activity Diagram for sign up for Users

3. Activity Diagram for Create Post

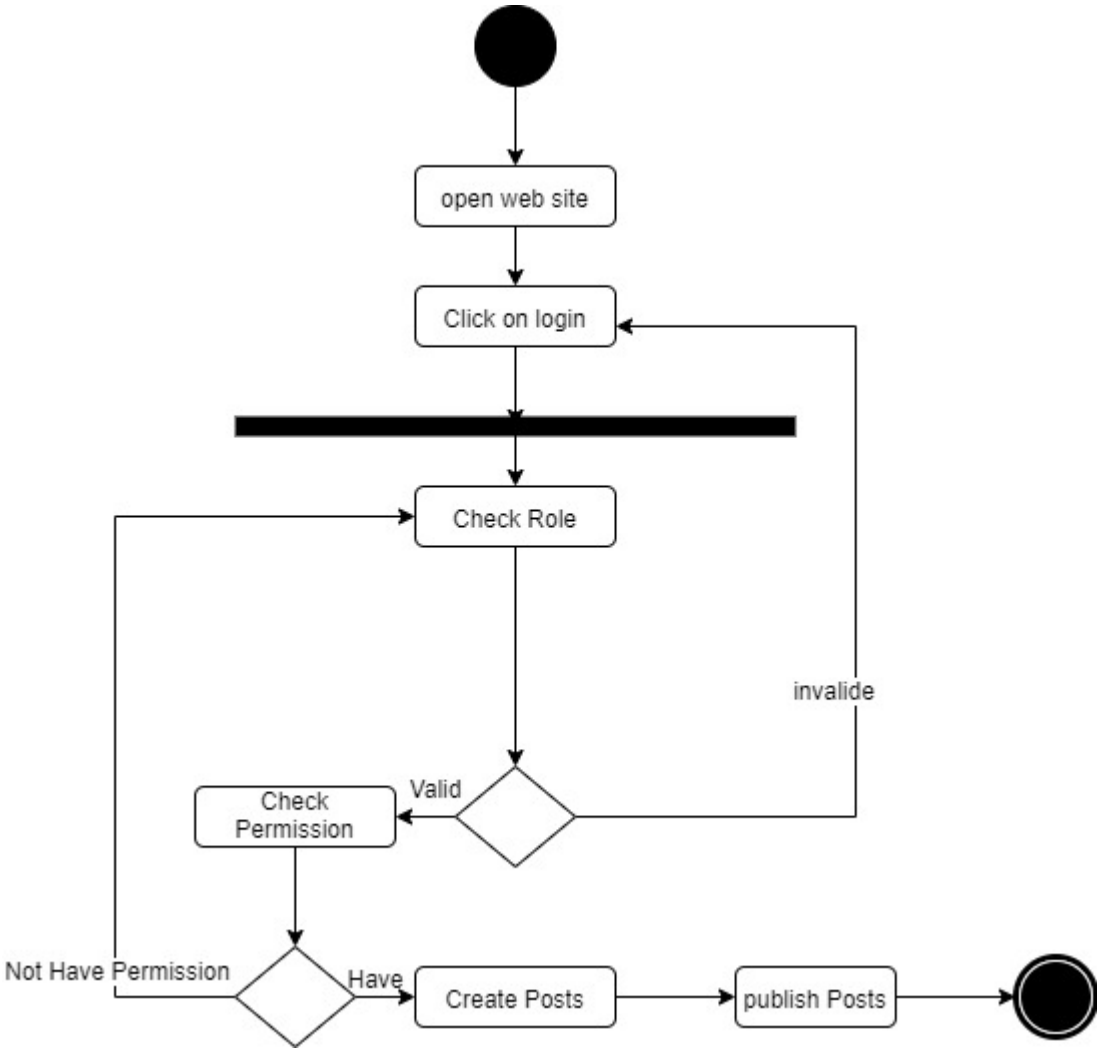


Figure 5 Activity Diagram for Create Posts

Chapter 3: Design

In this chapter, the requirements and analysis in the previous chapter will be converted into a physical model of the system, illustrating the aspects of system structure design and database design, ("What to do" requirements to "How to do" design).

3.1 Class diagram

In software engineering, a class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.

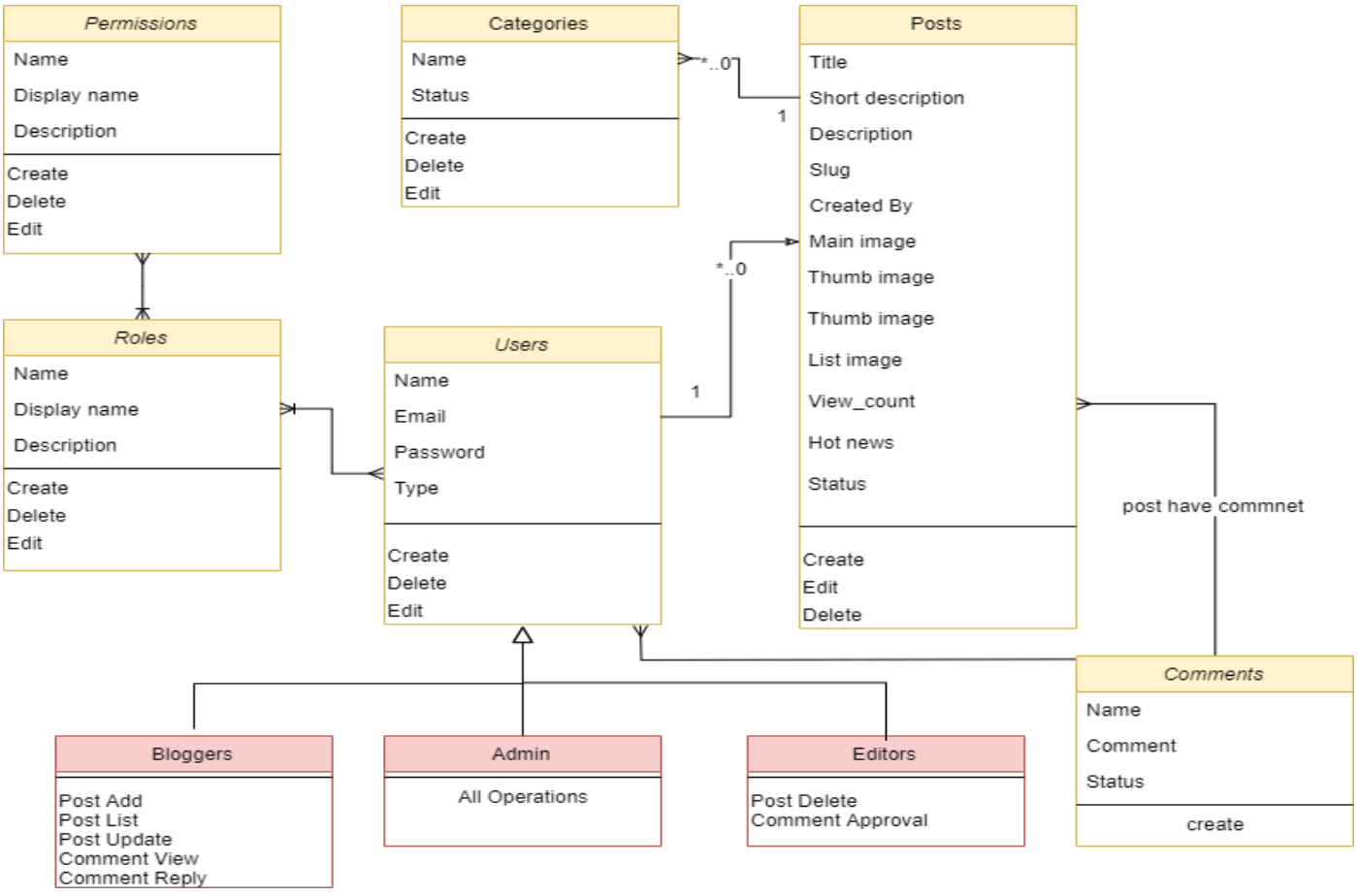


Figure 6 Class diagram

3.1 Data Base Tables

Data Base: Table Users

Data Name	Type
Id	big Increments
Name	String
Email	String
email_verified_at	timestamp
Password	String
Type	integer

Data Base: Table Permission

Data Name	Type
Id	big Increments
Name	String
Display Name	String
Description	String

Data Base: Table Role

Data Name	Type
Id	big Increments
Name	String
Display Name	String
Description	String

Data Base: Table categories

Data Name	Type
Id	big Increments
Name	String
Status	integer

Data Base: Table Posts

Data Name	Type
Id	big Increments
Title	String
Short Description	Long Text
Slug	String
Created by	integer
Main image	String

Thumb image	String
List image	String
View Count	Integer
Hot News	Integer
Status	integer

3.3 Normalization

Data required by Tables with relations:

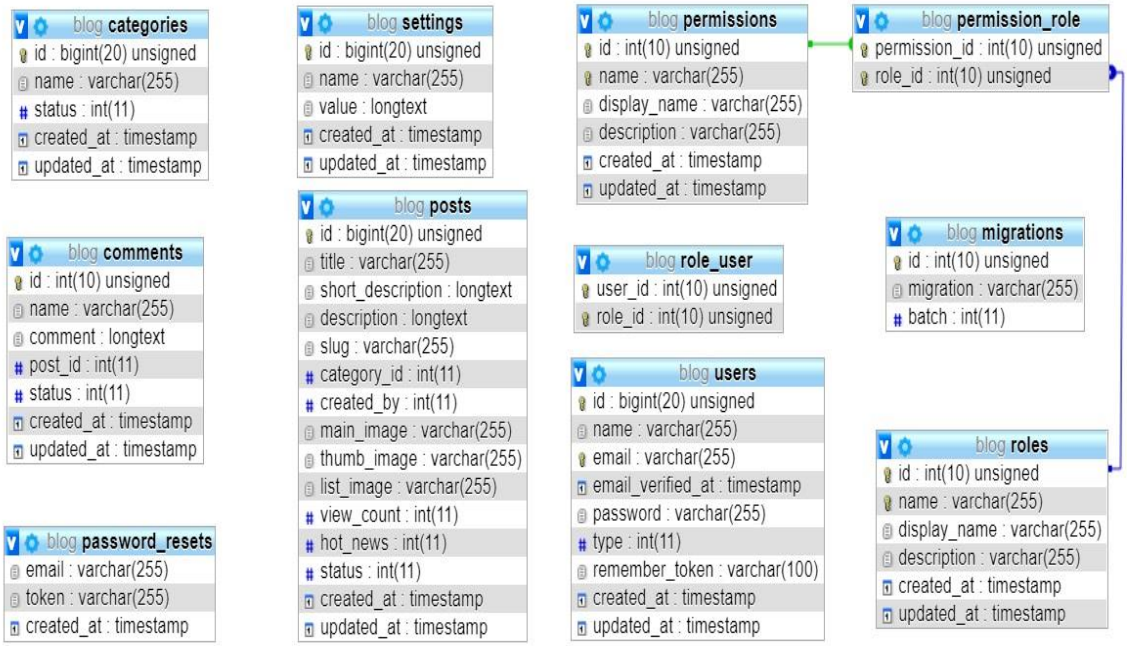


Figure 7 Normalization

3.4 Mock-ups

Is a design work for website design screen?

Website Mock-ups

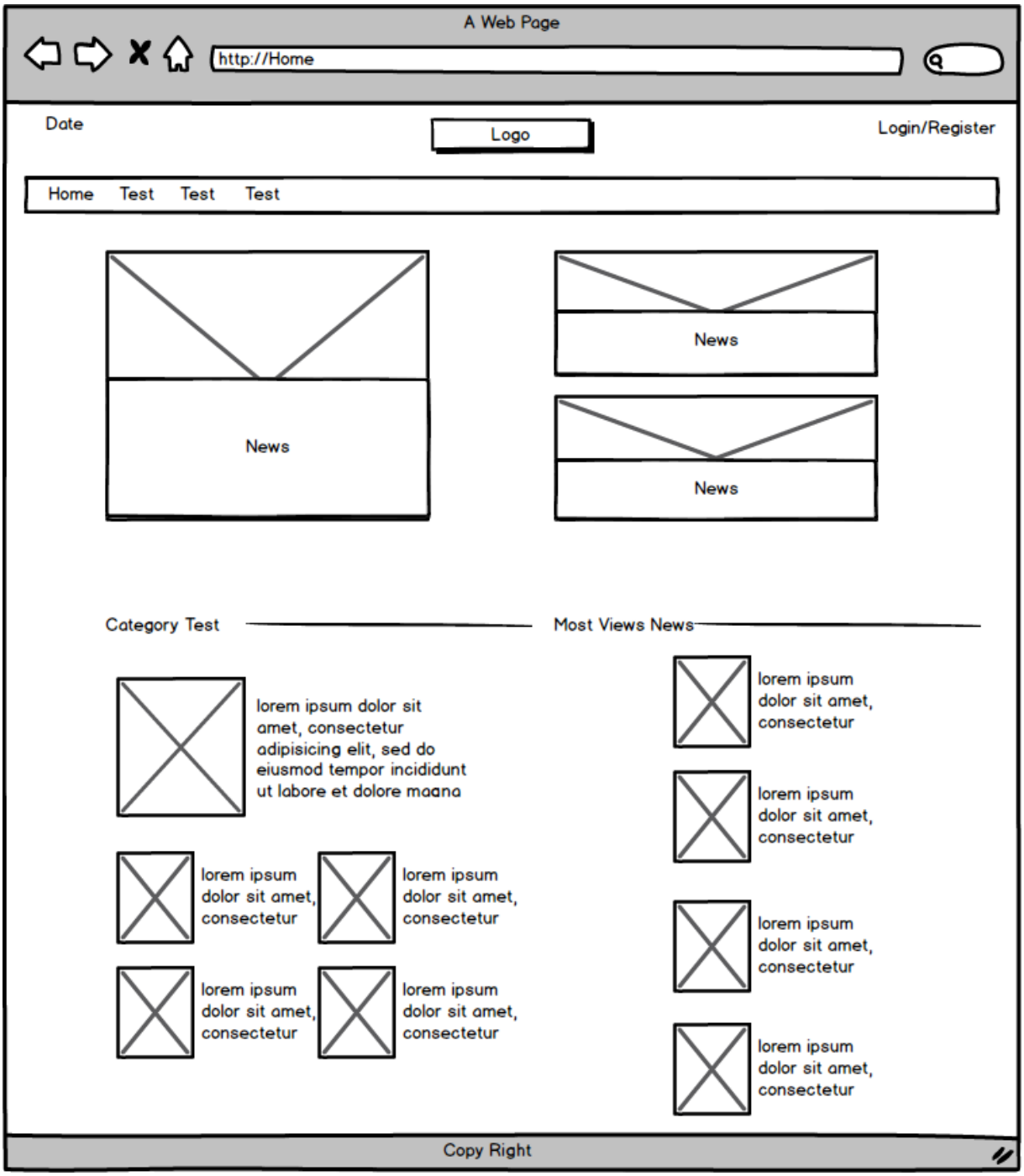


Figure 8 Home Page

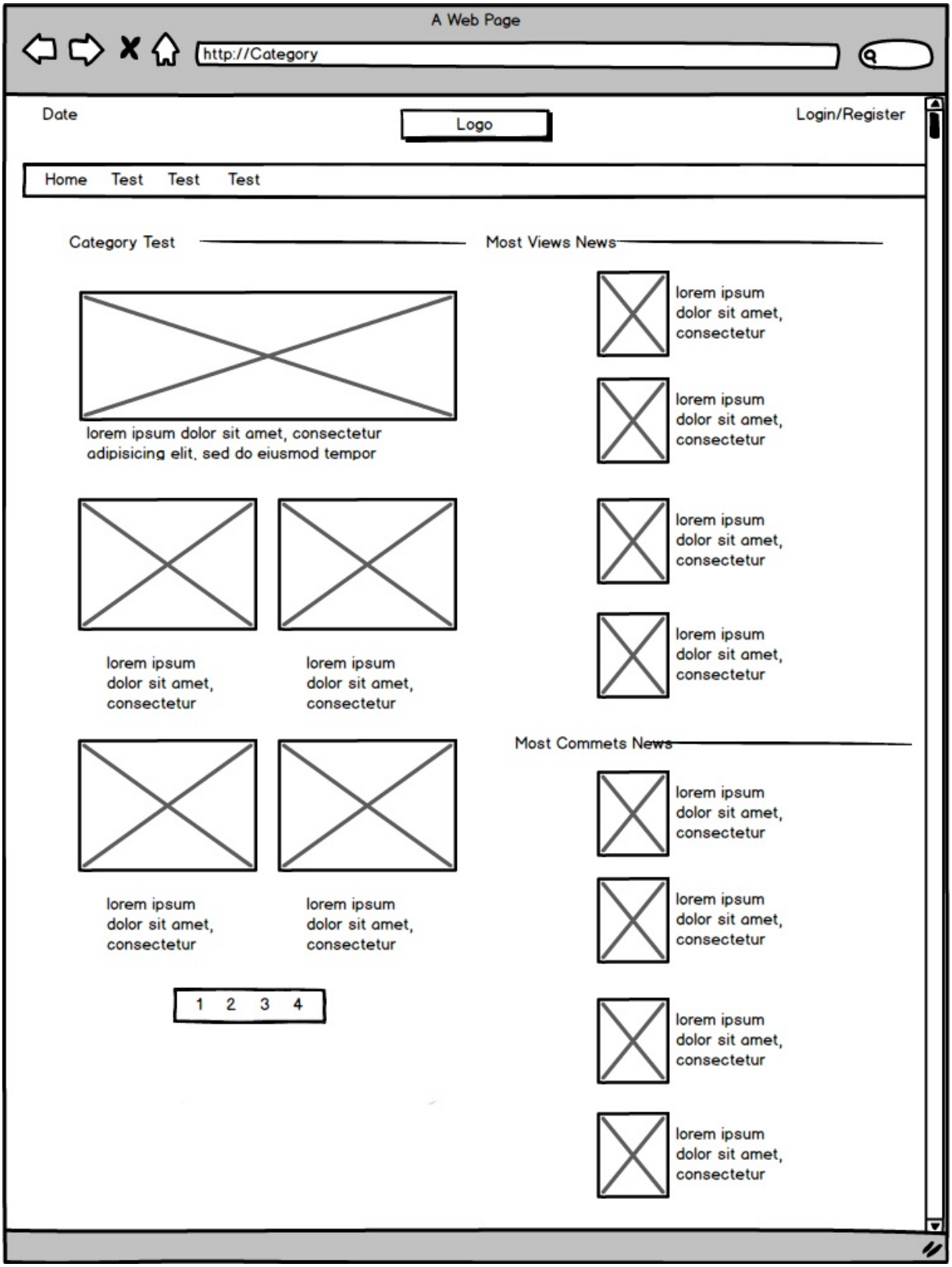


Figure 9 Category Page

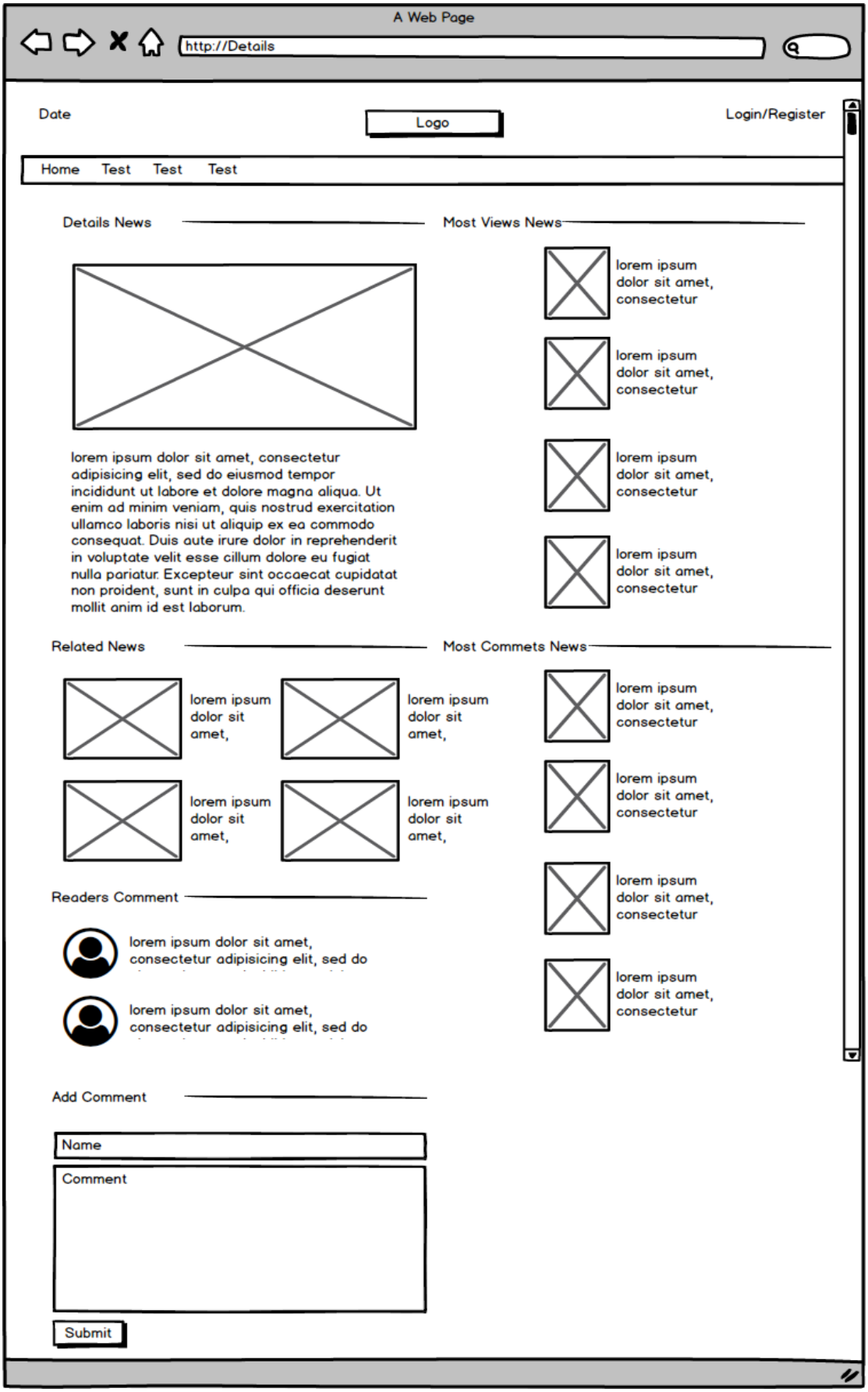


Figure 10 Details Page

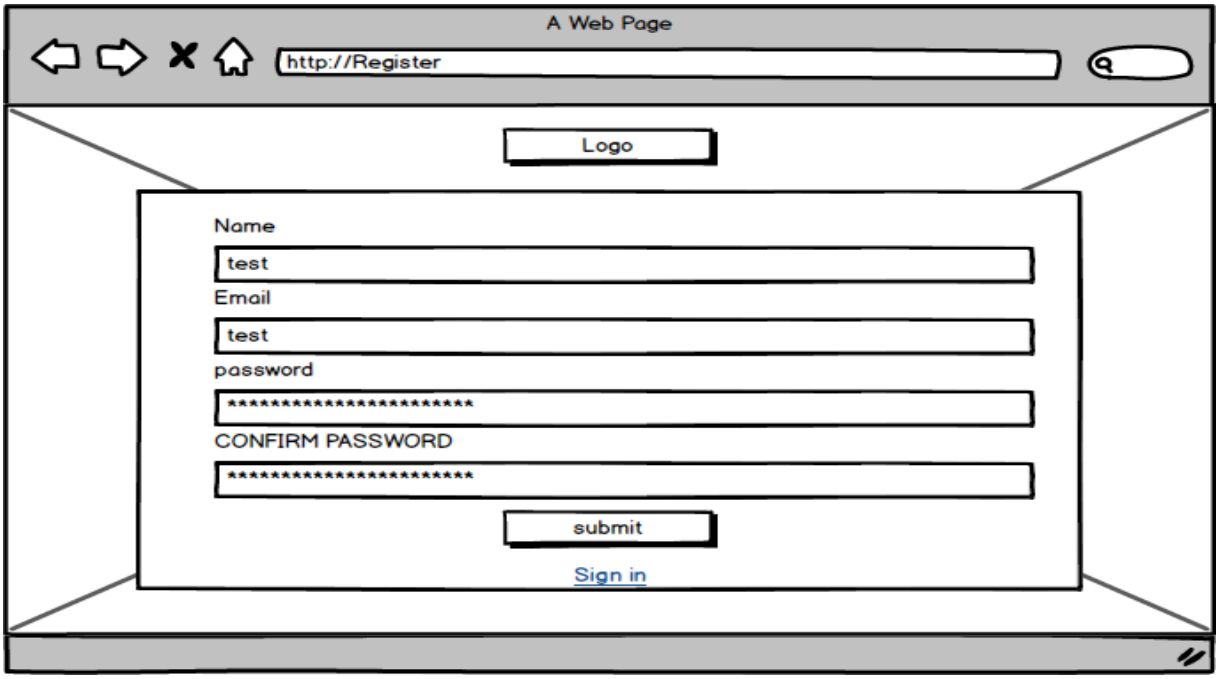


Figure 11 Register Page

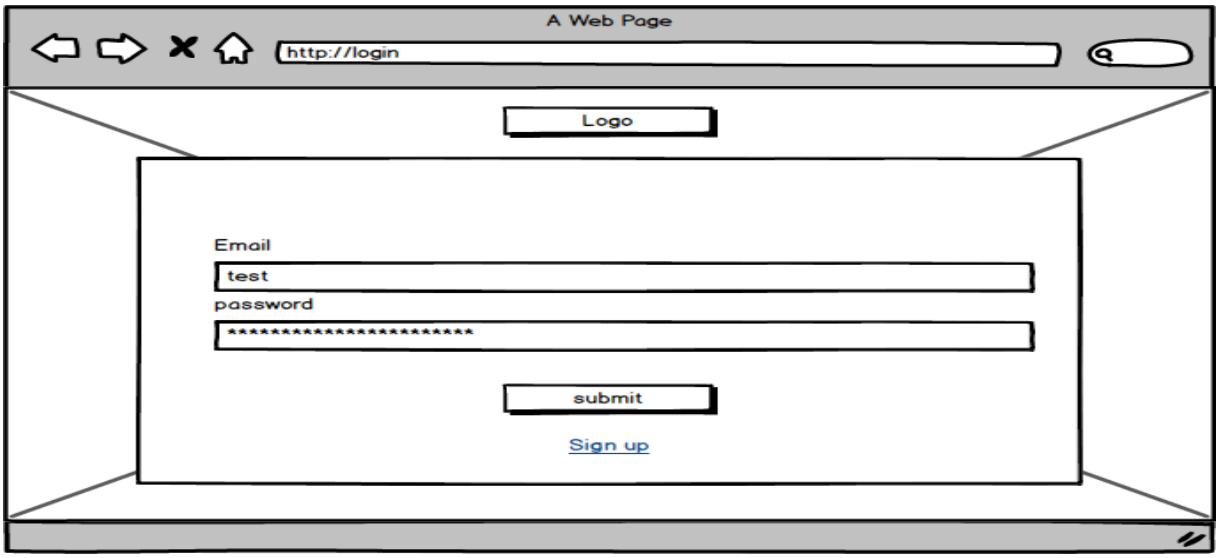


Figure 12 Login Page

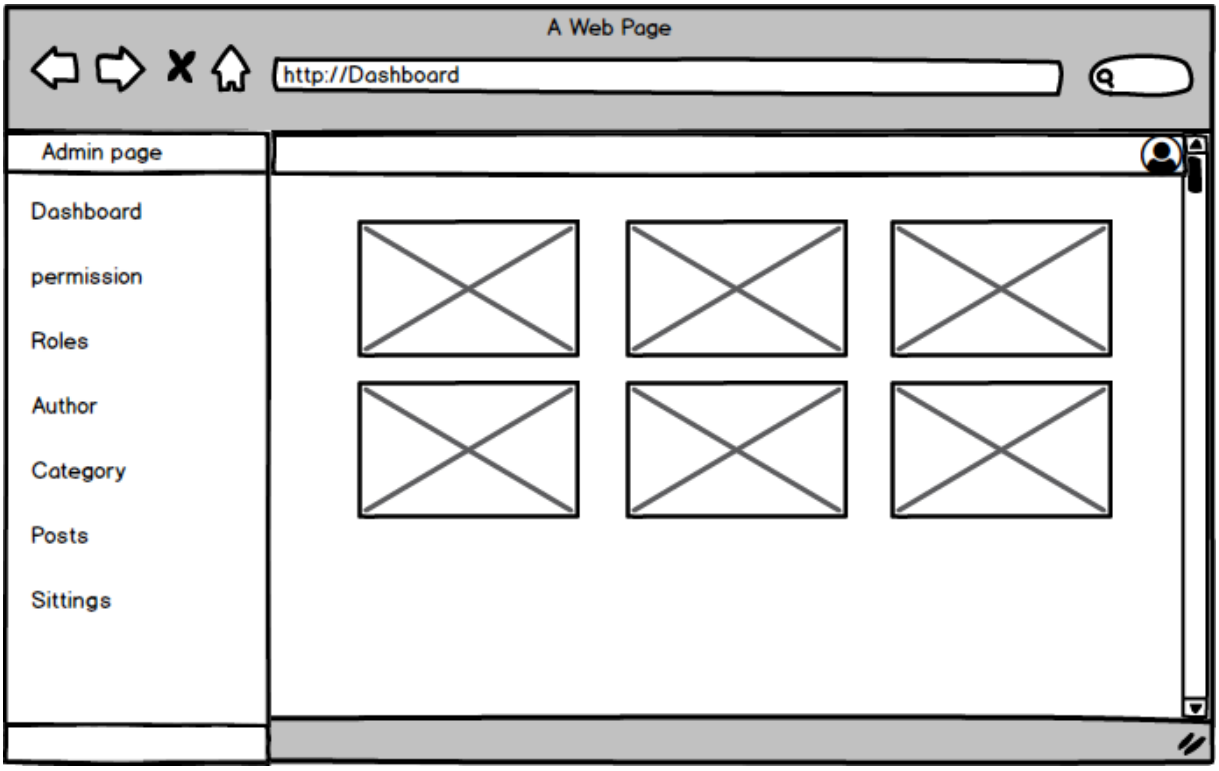


Figure 13 Dashboard Page

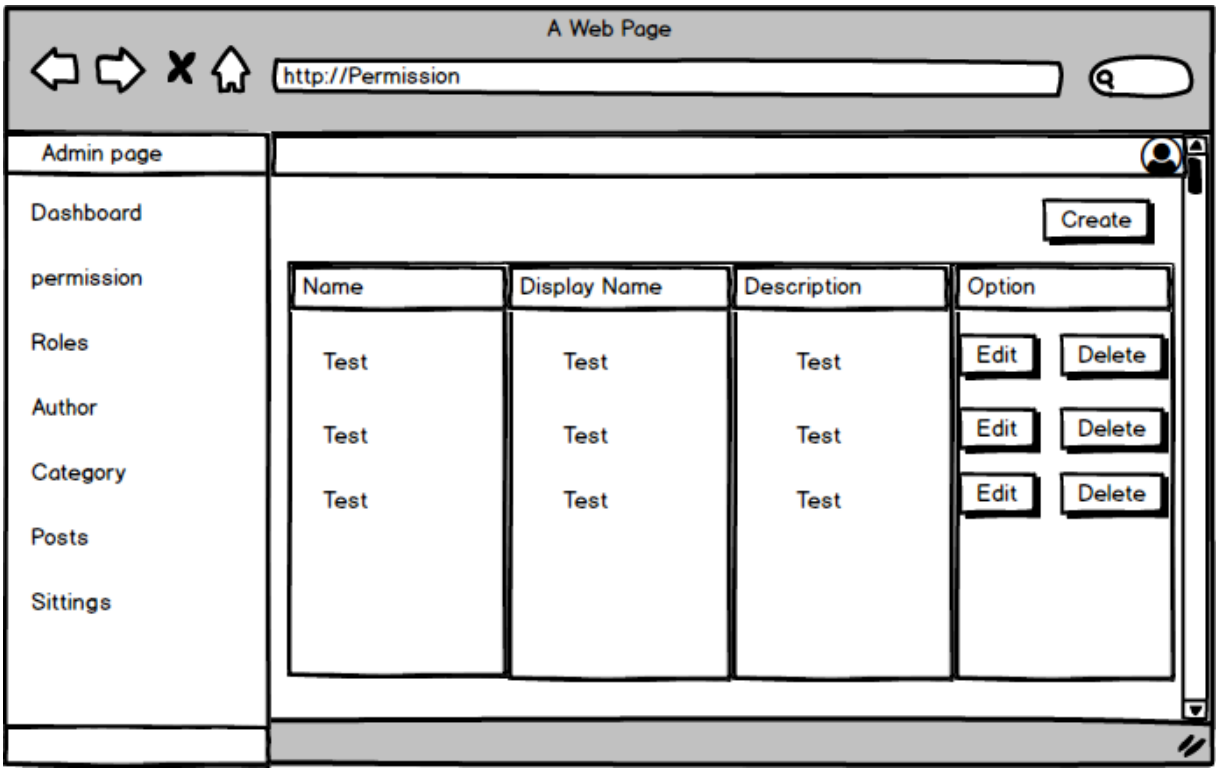


Figure 14 permission Page

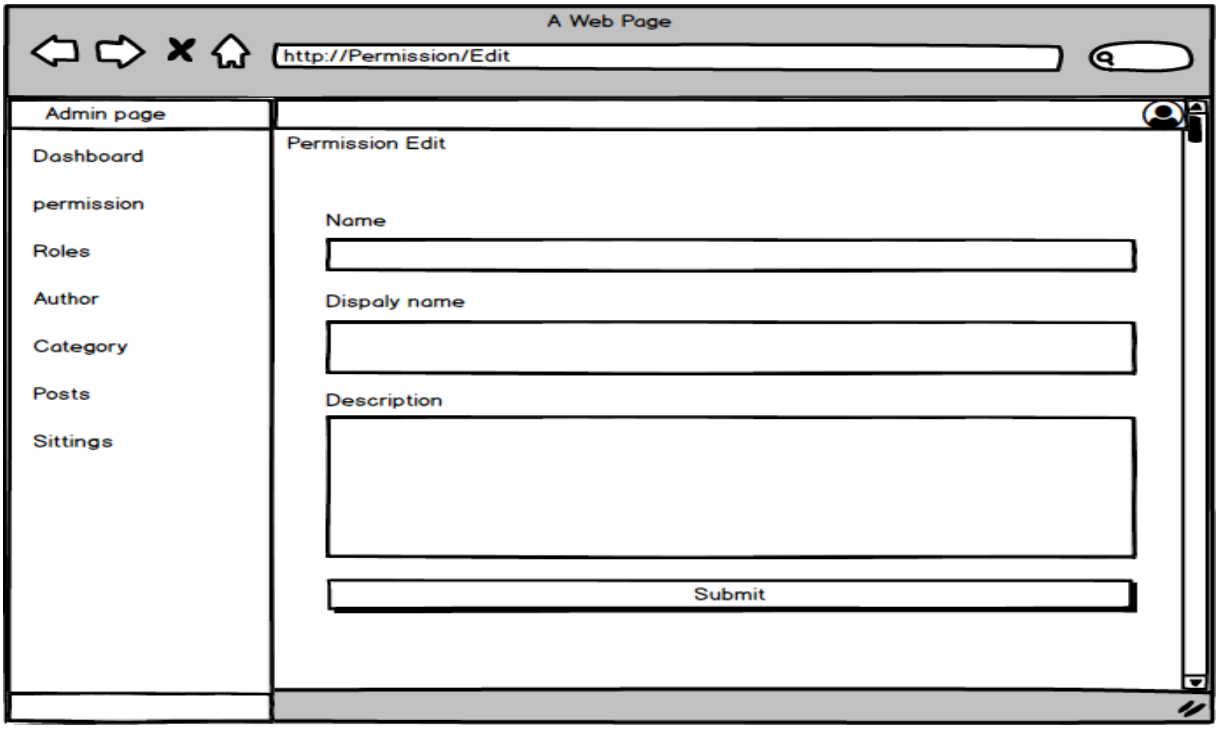


Figure 15 permission Edit Page

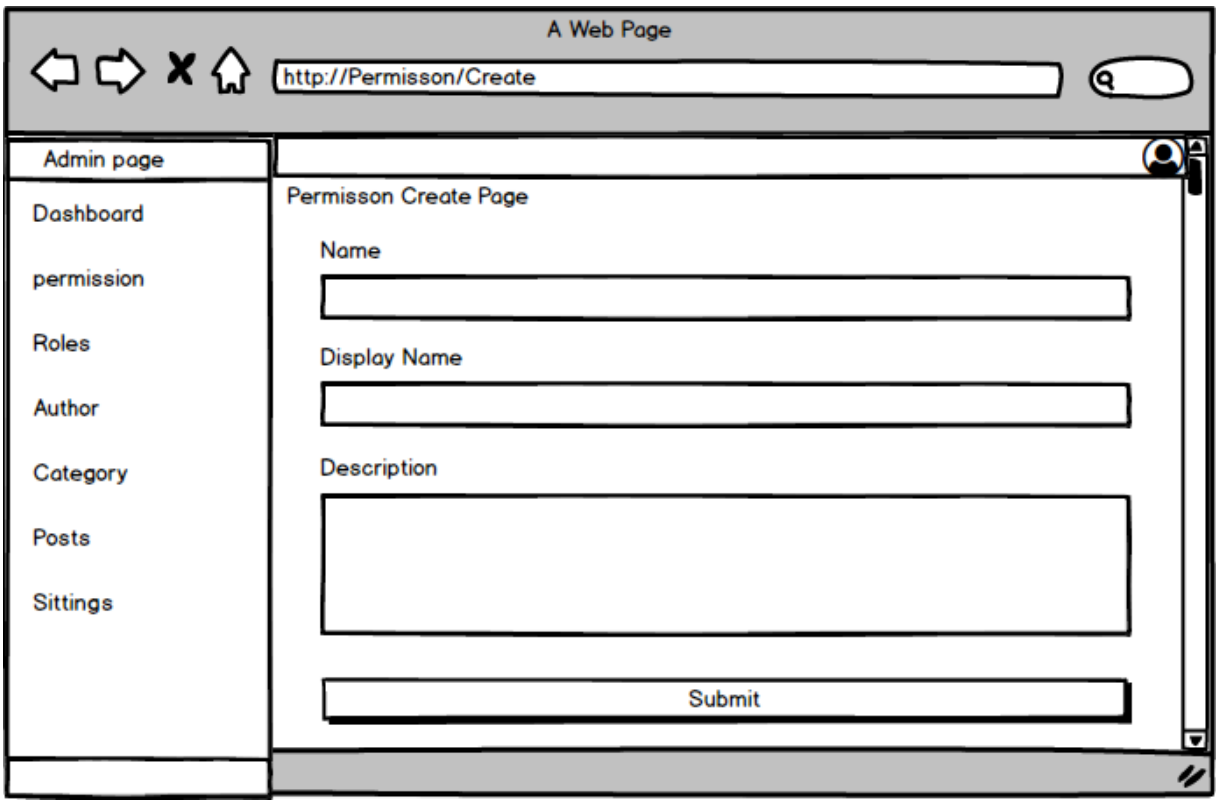


Figure 16 Edit Page

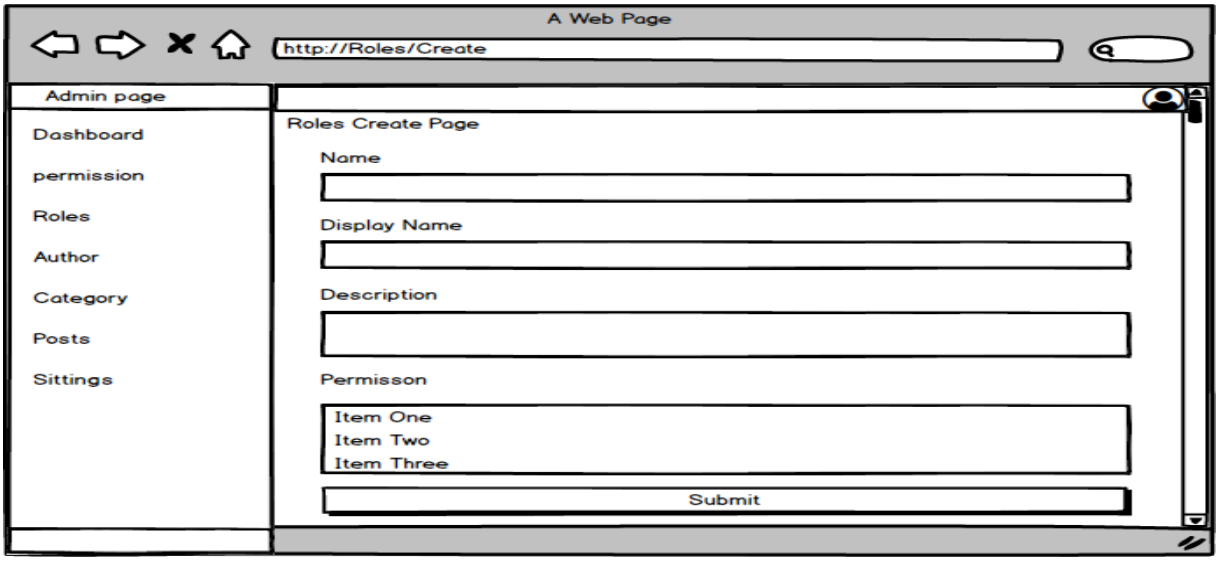


Figure17 Roles Edit Page

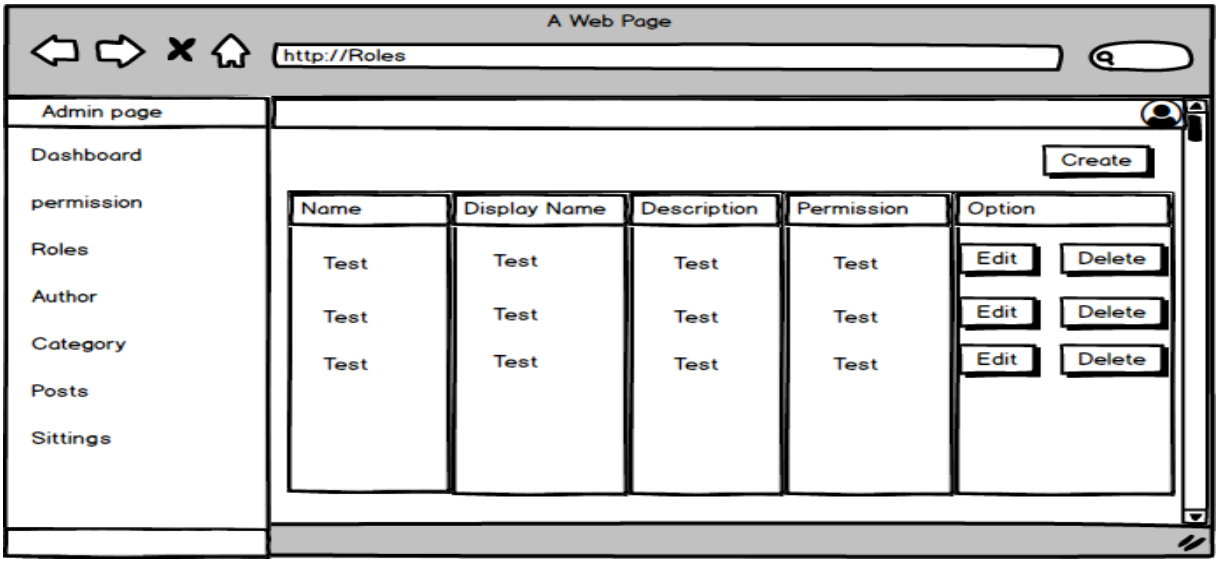


Figure 18 Roles Page

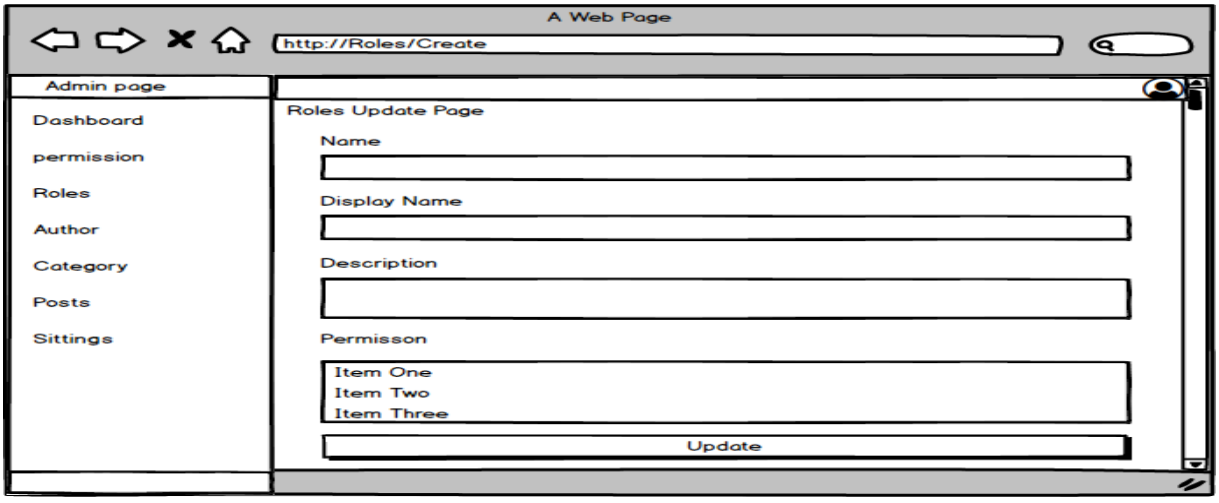


Figure 19 Roles create Page

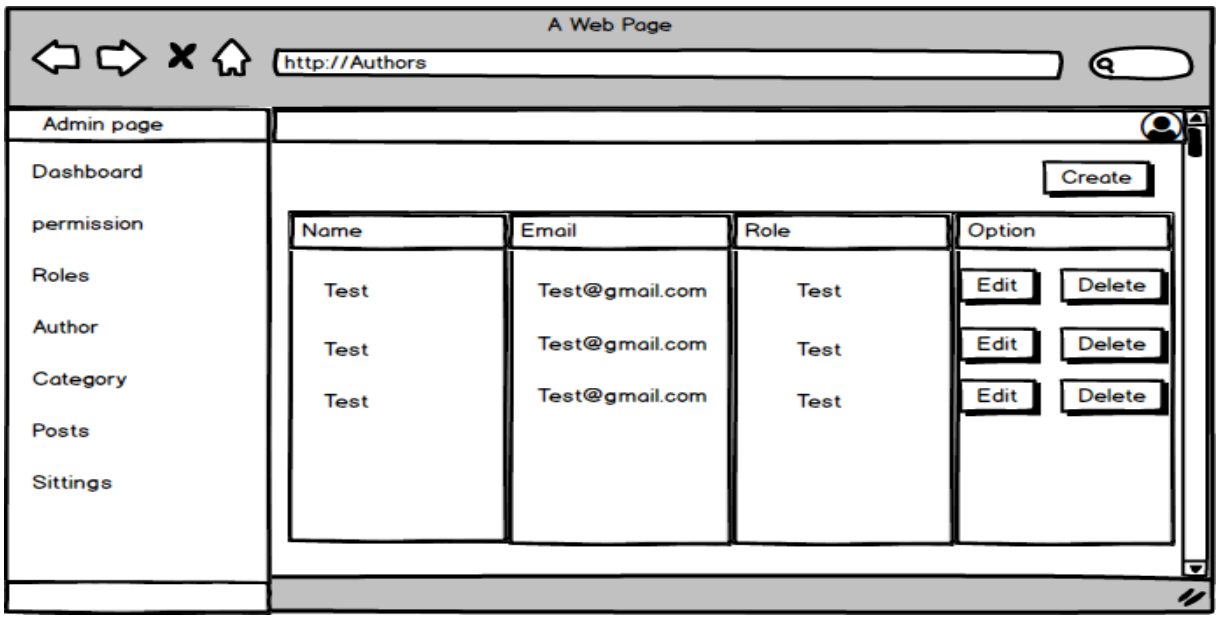


Figure 20 Authors Page

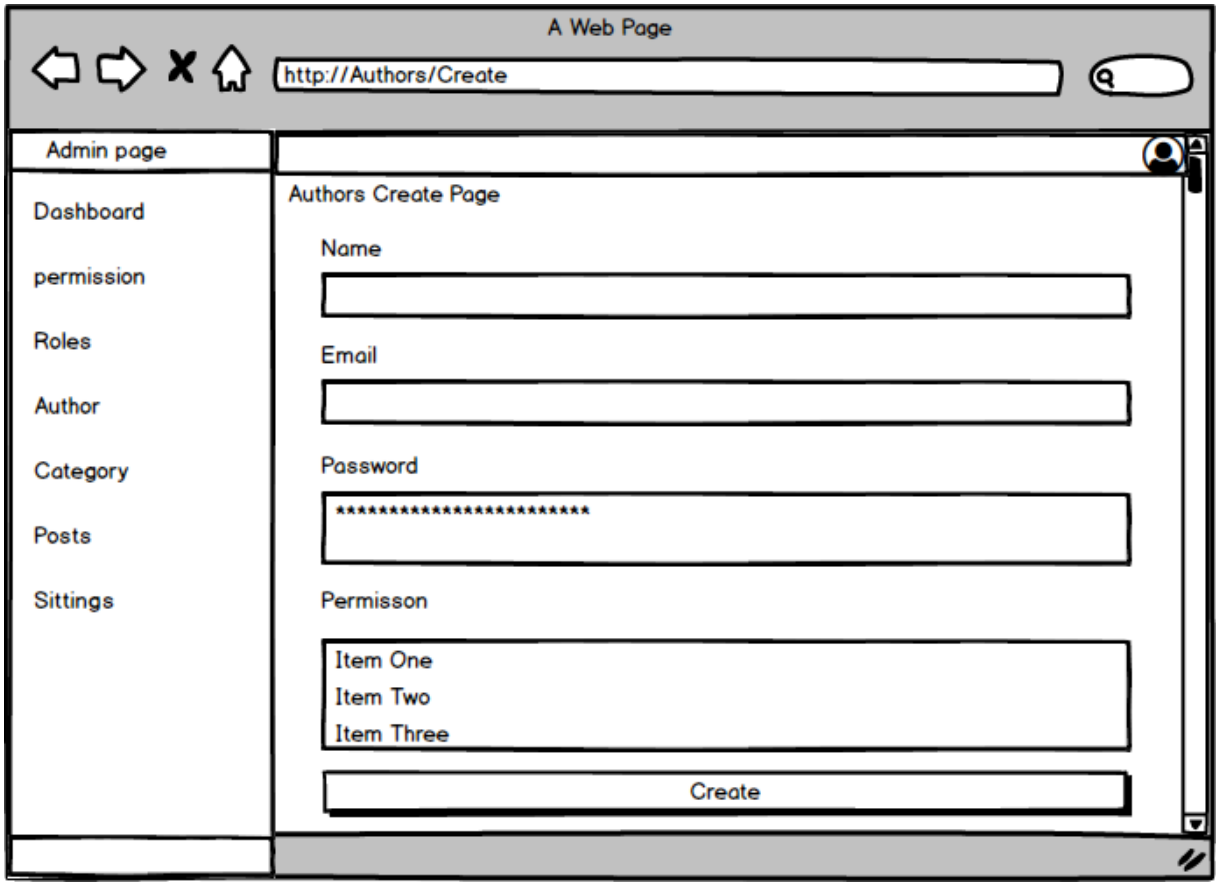


Figure 20 Authors create Page

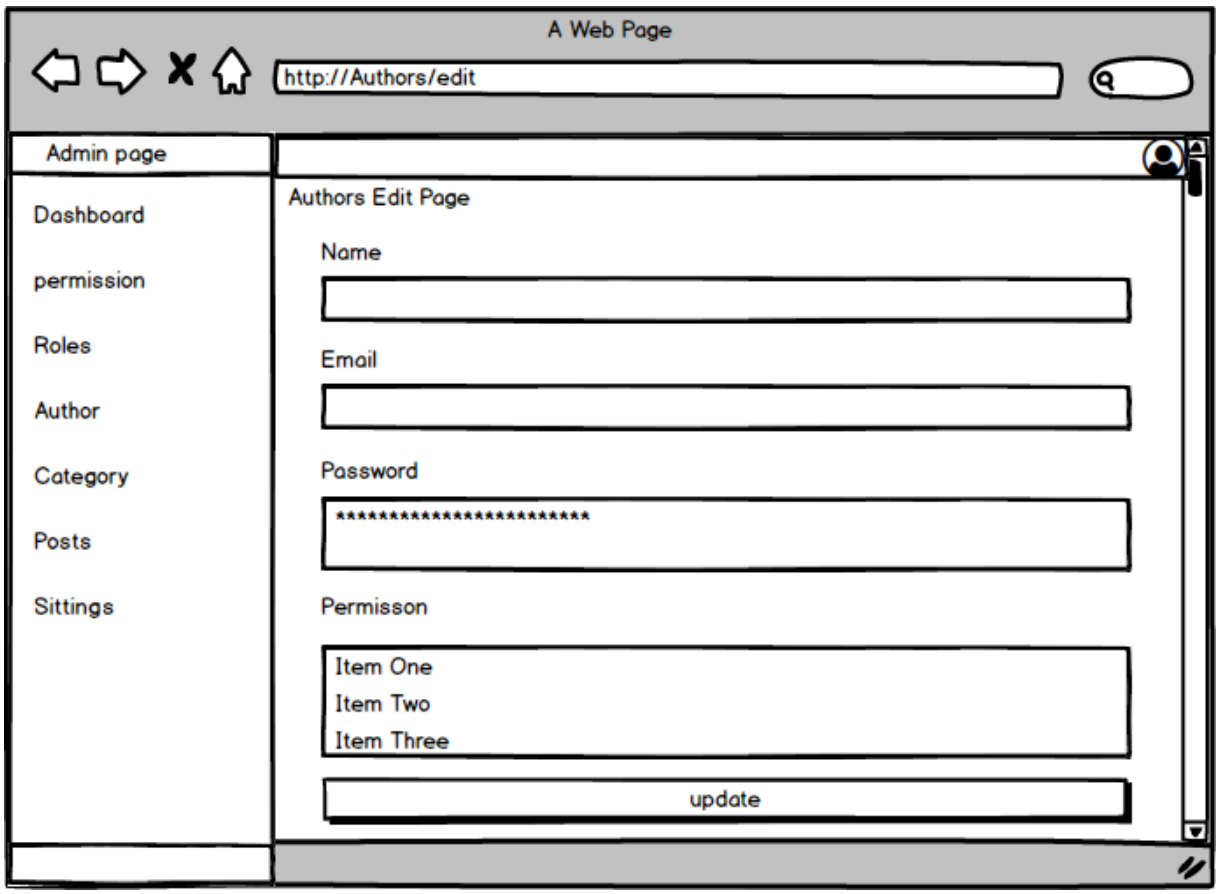
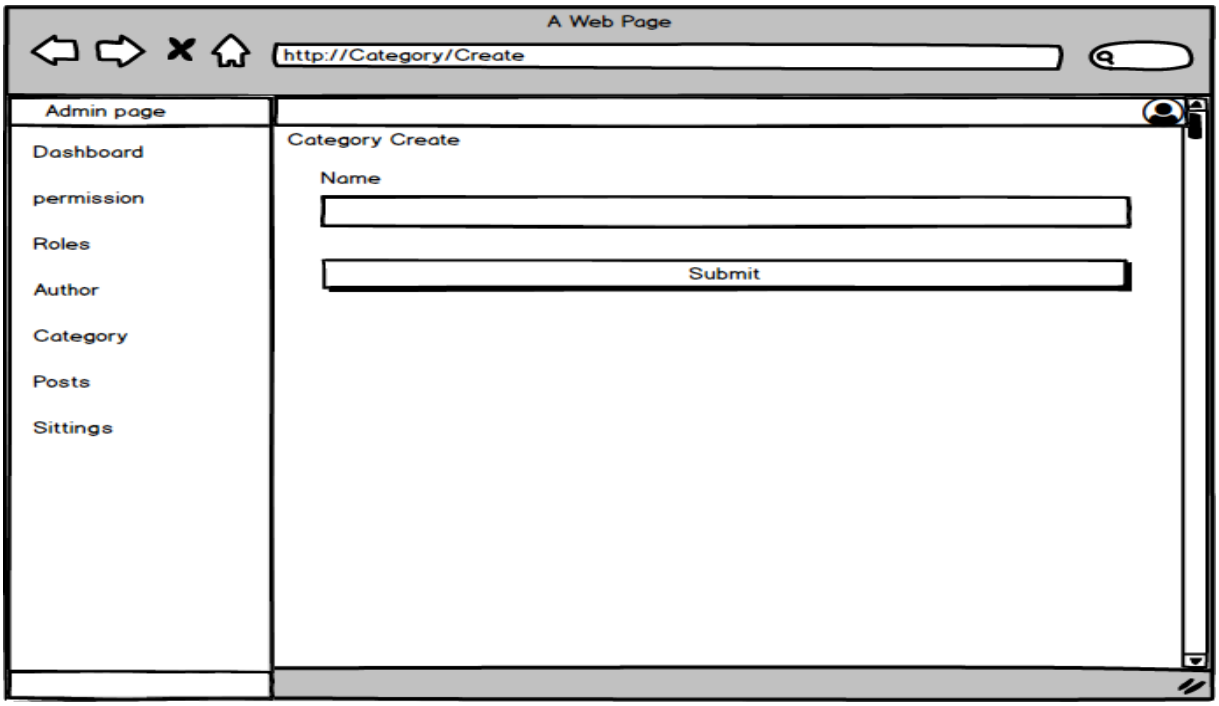


Figure 21 Authors Edit Page

Figure 22 Category create Page



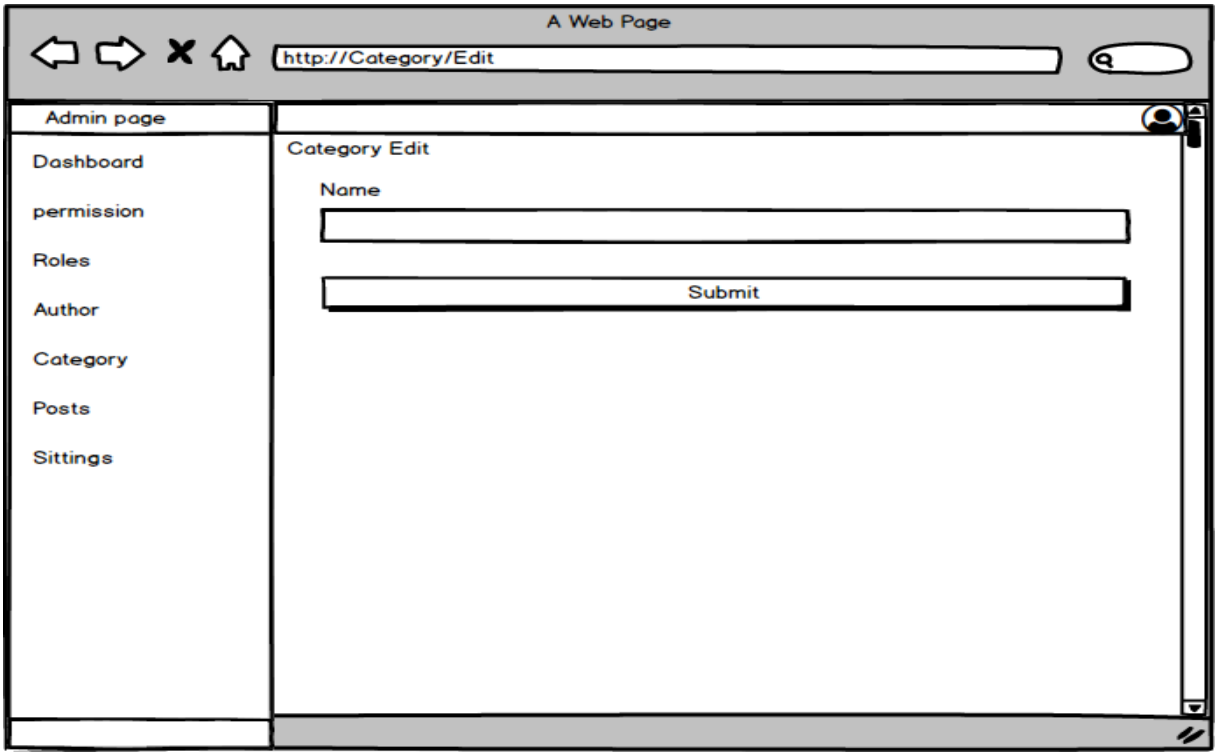


Figure 23 Category Edit Page

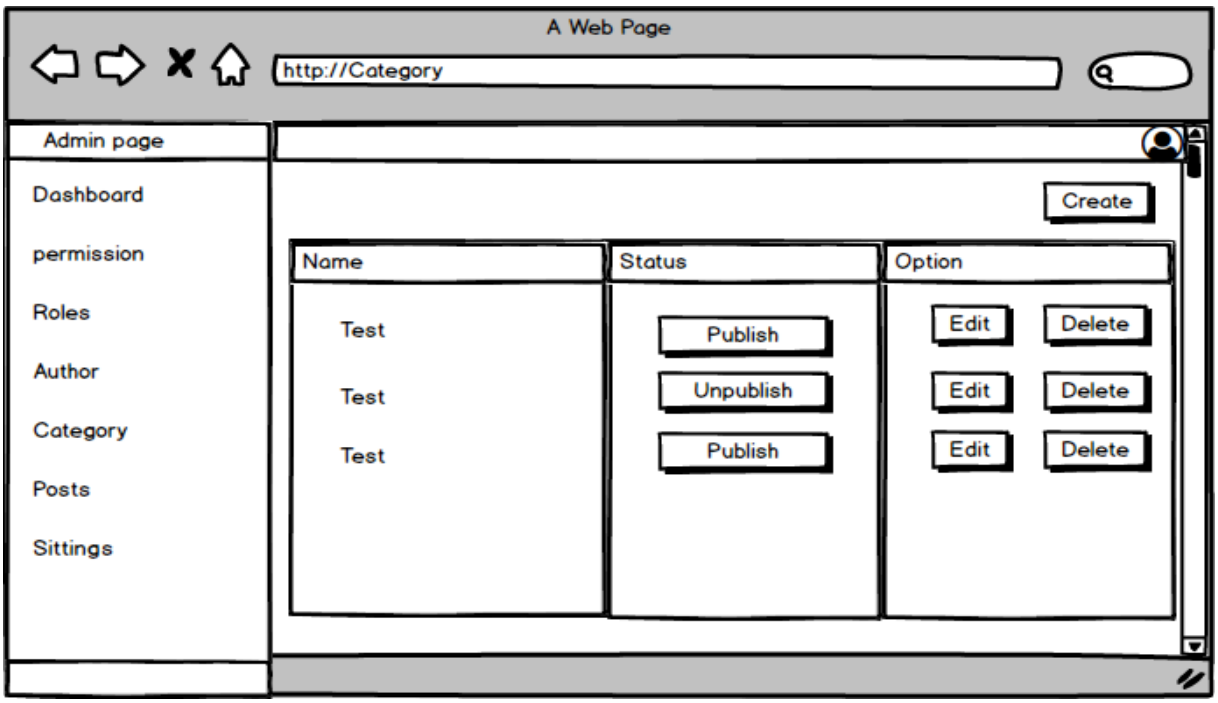


Figure 24 Category Page

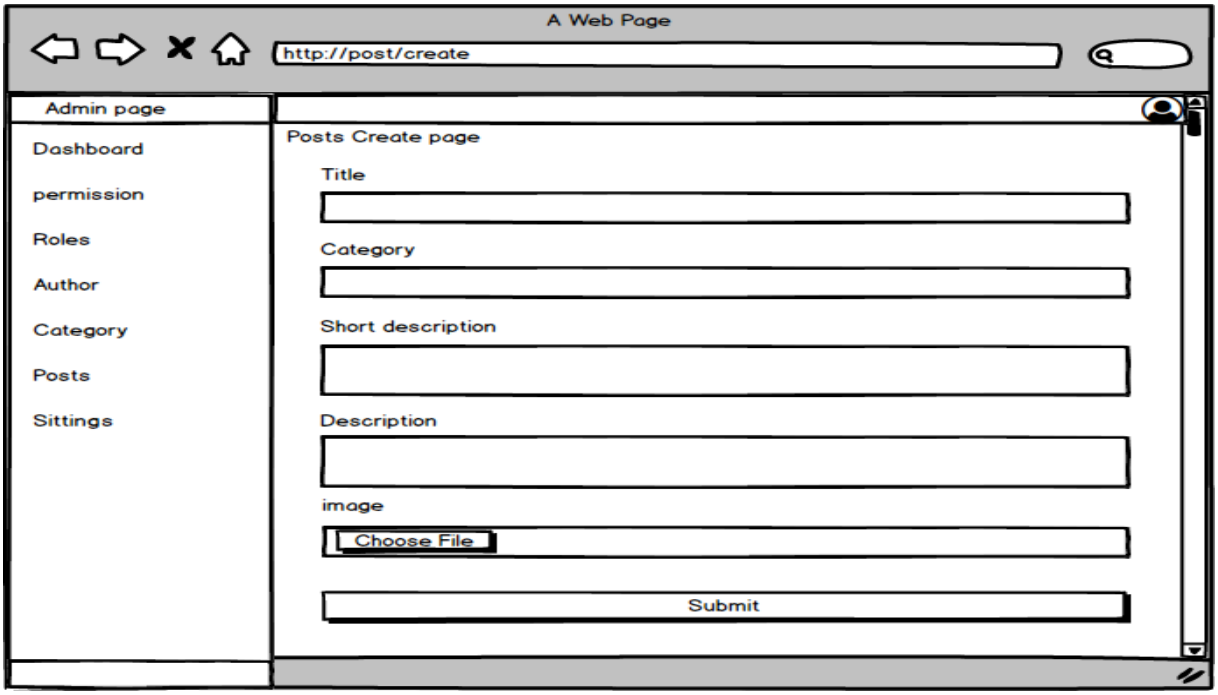


Figure 25 post create Page

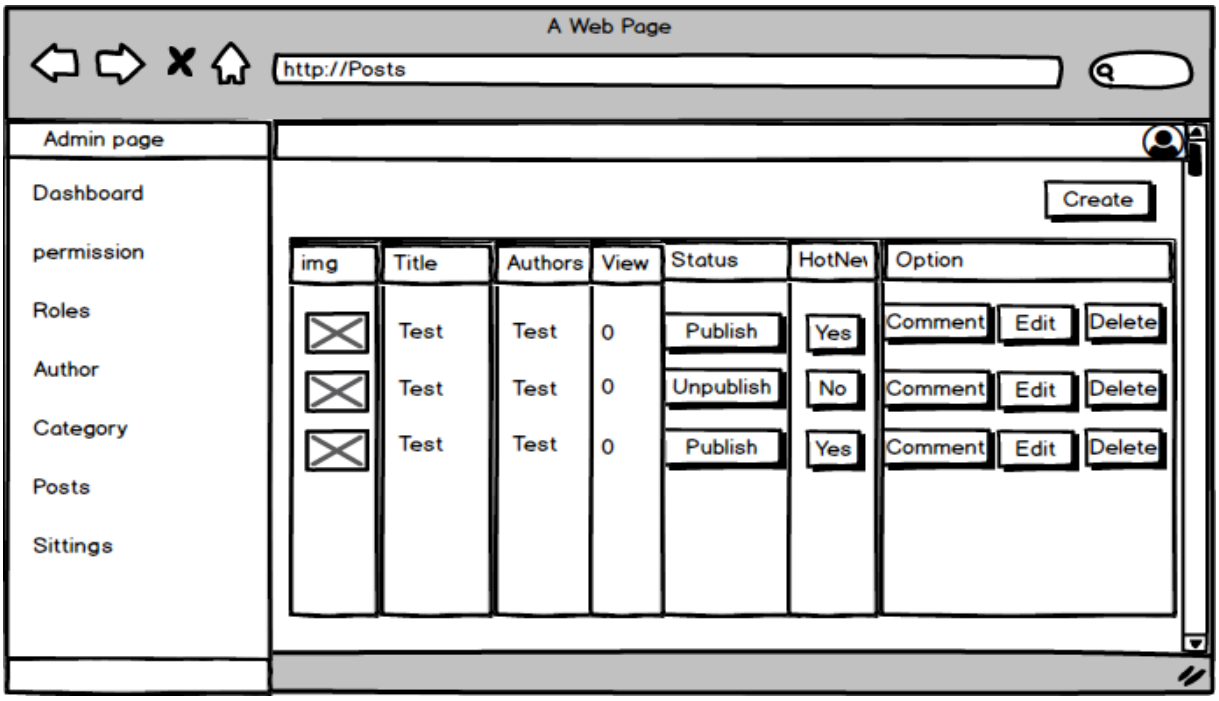


Figure 26 post Page

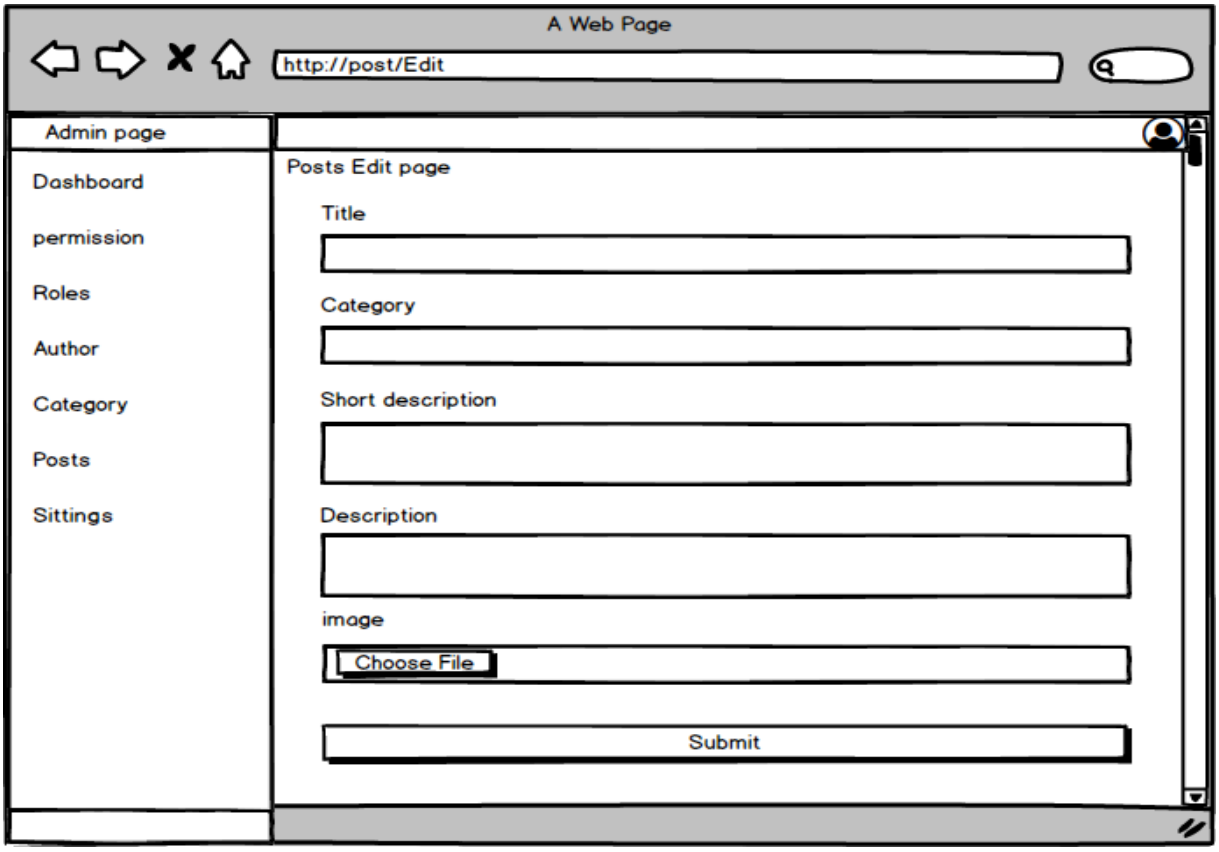


Figure 27 post Create Page

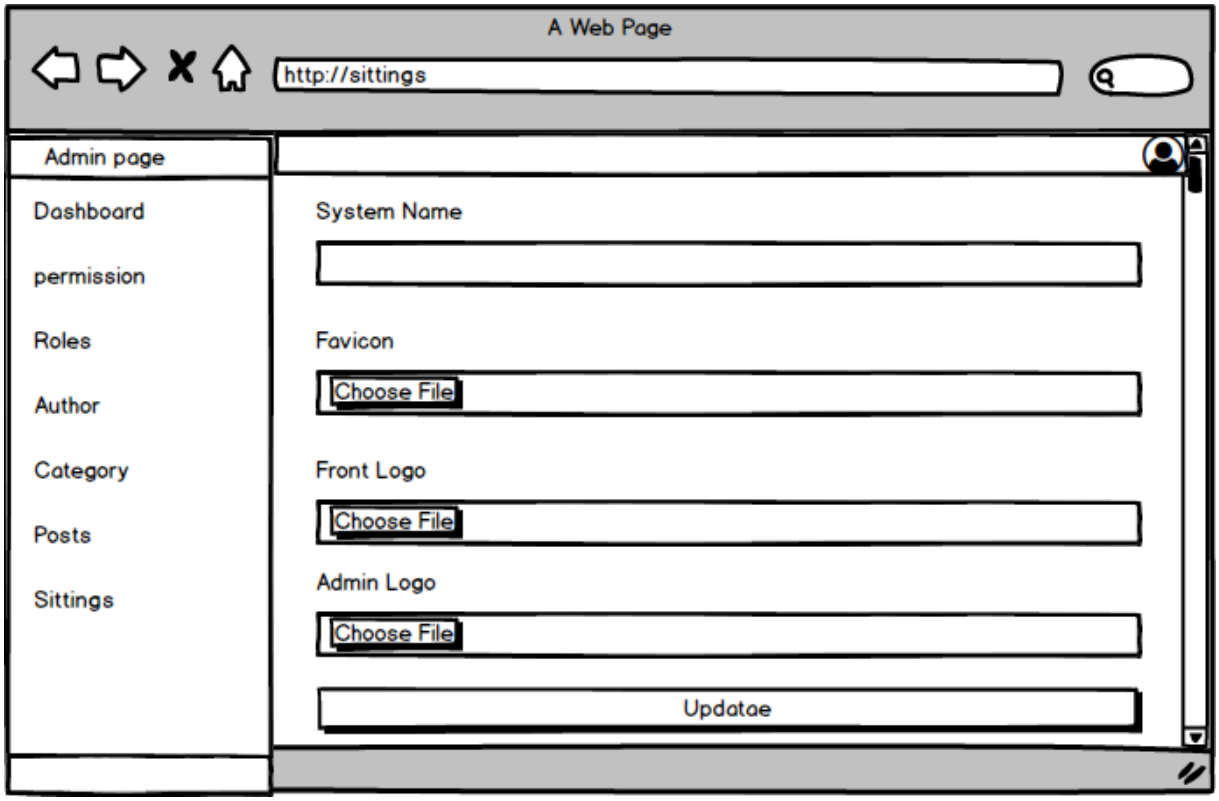


Figure 28 Sitting Page

Chapter 4: Result & Recommendation

When project finish

Reference

1- https://laravel.com/docs/6.x
2- https://laracasts.com/
3- https://stackoverflow.com/
4- https://github.com/
5- https://www.php.net/docs.php
6- https://www.wikipedia.org/