**Content Management System**

A project submitted to

**UKA TARSADIA UNIVERSITY**

in partial fulfillment of the requirements for the degree of

**Master of Science**

in

**Information Technology**

for

**5 Years Integrated M.Sc.(IT)**

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**CERTIFICATE**

This is to certify that **Drashti H. Pancholi (201806100110024) & Yash M. Dhameliya (201806100110110)** has submitted project entitled “**Content Management System”** as the partial fulfillment for the award of the degree of Master of Science in Information Technology for 5 Years Integrated M.Sc.(IT) in 2021 – 2022.

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1. **Introduction**
   1. **Problem Definition**

An increasing number of organizations have web sites. The trend is to disseminate responsibility of managing web content for the web site to the people who generate it rather than webmaster. At the same time, this scenario creates a situation in which people who are uncomfortable with working on web design are forced to complete tasks for a web site. So we make content management system is for creating, managing, and optimizing people digital experience. More specifically, a CMS is a software application that allows users to collaborate in the creation, editing, and production of digital content: web pages, blog posts, etc.

* 1. **Initial Requirement Document**

|  |  |  |
| --- | --- | --- |
| Title of the project | | Content Management System |
| Stakeholders involved in capturing requirement | | Admin, Blogger |
| Techniques used for requirement capturing | | Brain Storming, Interface analysis |
| Name of the person along with a designation | | Yash Dhameliya (Myself),  Drashti Pancholi (Myself) |
| Date | | 18th January 2022 |
| Users of the system | | Admin, Blogger |
| Version | | 1.0 |
| **Consolidated list of initial requirements** | | |
| **Req #1** | All bloggers shall be able to do registration. | |
| **Req #2** | All bloggers shall be able to do login. | |
| **Req #3** | All bloggers shall be able to do forgot password. | |
| **Req #4** | Admin shall be able to do login. | |
| **Req #5** | All bloggers can be able to add their blog post. | |
| **Req #6** | All bloggers can be able update their blog post. | |
| **Req #7** | All bloggers can be able delete their blog post. | |
| **Req #8** | All bloggers can view the all blogs. | |
| **Req #9** | All bloggers can be able to add their about us, contact us and privacy policy pages. | |
| **Req #10** | All bloggers can be able to update their about us, contact us and privacy policy pages. | |
| **Req #11** | All bloggers can be able to delete their about us, contact us and privacy policy pages. | |
| **Req #12** | All bloggers can view the about us, contact us and privacy policy pages. | |
| **Req #13** | All bloggers can do comments on others blog post. | |
| **Req #14** | All bloggers can be able delete their blog post comments. | |
| **Req #15** | Admin can be able to show all bloggers details. | |
| **Req #16** | Admin manage blog’s categories. (update, insert, delete) | |
| **Req #17** | Admin can be able to show all blogs. | |
| **Req #18** | Admin and All bloggers can be able to do logout. | |

* 1. **Project Objective**

Content Management System helps different types of bloggers to create of their blog site. It also having the ability to update, change or delete any images, text, title, or categories. For bloggers the system will make it easier to keep number of content categories wise and reduce their overall cost.

* 1. **Project Scope**
* This system can only use to manage content in the one default template.
* This system allow only one author in one particular user account.
* Provide category facility to show category wise blog post.
* This system don’t have any widgets.

**Chapter: 2**

**Overall Description**

* 1. **Product Perspective/ Environment Description**
     1. **Hardware Interface/ Hardware Specification**
     + **Customer side**
     + Screen resolution of at least Minimum 640 \* 480 pixels to Maximum 1920 \* 1080.
     + Minimum 4GB RAM require.
     + Minimum 5GB Hard Disk required.
     + x64-based processor required.
     + **Developer side**
     + Screen resolution of 1920 \* 1080.
     + Minimum 4GB RAM require.
     + Minimum 5GB Hard Disk required.
     + x64-based processor required.
     1. **Software Interface/ Software Specification**
     + **Customer side**
     + Windows OS 10 or Higher
     + Any Web Browser
     + **Developer side**
     + Windows OS 10 or Higher
     + Development Tool: Microsoft Visual Studio 2019
     + Frontend: React js with frame work (material-ui)
     + Backend: Node js
     + Database: Mongo DB
     + Any Web Browser

**Chapter: 3**

**System Specific Requirements**

* 1. **Functional Requirement**
* **Registration and Login**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The bloggers shall be able to registration.   * + The bloggers needs to add the following details:     - Username     - E-mail address     - Password | Registration form |
| FR 2 | The bloggers shall get a system-generated email for email verification. | System-generated email |
| FR 5 | The system shall allow the admin and bloggers to log into their account by accepting the correct username or emailid and password. | Login form |

* **Forgot Password**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The bloggers shall be able to Forgot password.   * + The bloggers needs to add the following details:     - Registered E-mail address | Forgot form |
| FR 2 | The bloggers shall get a system-generated email for Forgot password. | System-generated email |
| FR 3 | The bloggers shall be able to add new password.   * + The bloggers needs to add the following details:     - New Password     - Confirm Password | Add new password |

* **Manage bloggers**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The admin shall be able to view bloggers details. | View blogger. |

* **Manage blog categories**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The admin shall be able to add categories.   * + The admin needs to add the following details:     - Category id     - Category name | Add category form. |
| FR 2 | The admin shall be able to update category details. | Update category form. |
| FR 3 | The admin shall be able to delete the category. | Delete categories. |
| FR 4 | The admin shall be able to view category. | View categories. |

* **Manage blog post**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The blogger shall be able to add their post.   * + The blogger needs to add the following details:     - Post id     - Post title     - Post Image     - Post Content     - Post URL | Add post form. |
| FR 2 | The blogger shall be able to update post details. | Update post form. |
| FR 3 | The blogger shall be able to delete the post. | Delete post. |
| FR 4 | The blogger shall be able to view post. | View post. |

* **Manage comments**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The blogger shall be able to add comments on all blog post.   * + The blogger needs to add the following details:     - Comment Details | Add comments. |
| FR 2 | The blogger shall be able to update their comments. | Update comments. |
| FR 3 | The blogger shall be able to delete their comments. | Delete comments. |
| FR 4 | The blogger shall be able to view all comments. | View comments. |

* **Manage about us**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The blogger shall be able to add their about us page.   * + The blogger needs to add the following details:     - About Us Id     - Site name     - Author name     - Author image     - Description | Add about us form. |
| FR 2 | The blogger shall be able to update about us details. | Update about us form. |
| FR 3 | The blogger shall be able to delete the about us. | Delete about us. |
| FR 4 | The blogger shall be able to view about us. | View about us. |

* **Manage contact us**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The blogger shall be able to add their contact us page.   * + The blogger needs to add the following details:     - Site name     - Email id     - Website Url     - Social media links | Add contact us form. |
| FR 2 | The blogger shall be able to update contact us details. | Update contact us form. |
| FR 3 | The blogger shall be able to delete the contact us. | Delete contact us. |
| FR 4 | The blogger shall be able to view contact us. | View contact us. |

* **Manage privacy policy**

|  |  |  |
| --- | --- | --- |
| **RN** | **Description** | **Comments** |
| FR 1 | The blogger shall be able to add their privacy policy page.   * + The blogger needs to add the following details:     - Site name     - Site Url     - Cookies     - Google ads     - Third party ads | Add privacy policy form. |
| FR 2 | The blogger shall be able to update privacy policy details. | Update privacy policy form. |
| FR 3 | The blogger shall be able to delete the privacy policy. | Delete privacy policy. |
| FR 4 | The blogger shall be able to view privacy policy. | View privacy policy. |

* 1. **Non-functional Requirement**
     1. **Usability:**

The System will be user-friendly and easy to operate, and the functions will be easily understandable.

* + 1. **Security:**

The System will be password protected. Users will have to enter the correct Email ID and password to access the system.

* + 1. **Responsive:**

The system will be designed to work on any modern digital device with browser compatibility of its display size, resolution, orientation and aspect ratio.

**Chapter: 4**

**System Design**

* 1. **Database Design**
     1. **Database Schema**
  + **tblusers** (userid[PK], username, emailid, password, usertype)
  + FD: userId -> Username, Email Id, Password, Usertype
  + **tblcategoies** (categoryid[PK], categoryname)
  + FD: categoryId-> Categoryname
  + **tblpost** (postid[PK], title, image, content, url)
  + FD: postId -> Title, Image, Content, Url
  + **tblcomments** (commentid[PK], title[FK], username[FK], commentdetail )
  + FD: commentid -> Title, Username, Commentdetail
  + **tblaboutus** (aboutusid[PK], sitename, authorname, authorimage, description)
  + FD: aboutusId -> Sitename, Authorname, Authorimage, Description
  + **tblcontactus** (contactusid[PK], sitename, emailid, websiteurl, socialmedialinks)
  + FD: contactusid -> Sitename, Emailid, Websiteurl, Social media links
  + **Tblprivacypolicy** (privacypolicyid[PK], sitename, siteurl, cookies, googleads, thirdpartyads)
  + FD: Privacypolicyid -> Sitename, Siteurl, Cookies, Googleads, Thirdpartyads
  1. **Data Dictionary**

**tblusers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Data Type** | **Constraint** | **Description** |
| userid | int | Primary Key | It contains unique id for all users. |
| username | Varchar(10) | Not Null | It contains the username. |
| emailid | varchar(150) | Not Null, unique | It contains the email id of users. |
| password | varchar(10) | Not Null | It contains a password for users for authentication. |
| usertype | varchar(8) | Not Null | It contains user type for user. |

**tblcategoies**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Data Type** | **Constraint** | **Description** |
| categoryid | int | Primary Key | It contains unique id for category. |
| categoryname | varchar(15) | Not Null | It contains the name of category. |

**tblpost**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Data Type** | **Constraint** | **Description** |
| postid | int | Primary Key | It contains unique id for post. |
| title | varchar(15) | Not Null | It contains the title of post. |
| image | image | Not Null | It contains the image of post. |
| content | varchar(500) | Not null | It contains the content of the post. |
| url | string | Not null | It contains the url of the post. |

**tblcomments**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Data Type** | **Constraint** | **Description** |
| commentid | int | Primary Key | It contains unique id for comments. |
| title | varchar(150) | Foreign Key | It contains the title of post. |
| username | varchar(10) | Foreign Key | It contains the username. |
| commentdetail | varchar(500) | Not null | It contains the content of the comment. |

**tblaboutus**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Data Type** | **Constraint** | **Description** |
| aboutusid | int | Primary Key | It contains unique id for about us. |
| sitename | varchar(15) | Not Null | It contains the site name of about us. |
| authorname | varchar(15) | Not Null | It contains the author name of about us. |
| authorimage | image | Not Null | It contains the author image of about us. |
| description | varchar(500) | Not Null | It contains the description of about us. |

**tblcontactus**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Data Type** | **Constraint** | **Description** |
| contactusid | int | Primary Key | It contains unique id for contact us. |
| sitename | varchar(15) | Not Null | It contains the site name of contact us. |
| emailid | varchar(15) | Not Null | It contains the email id of contact us. |
| websiteurl | string | Not Null | It contains the web site url of about us. |
| socialmedialinks | varchar(20) | Not Null | It contains the social media links. |

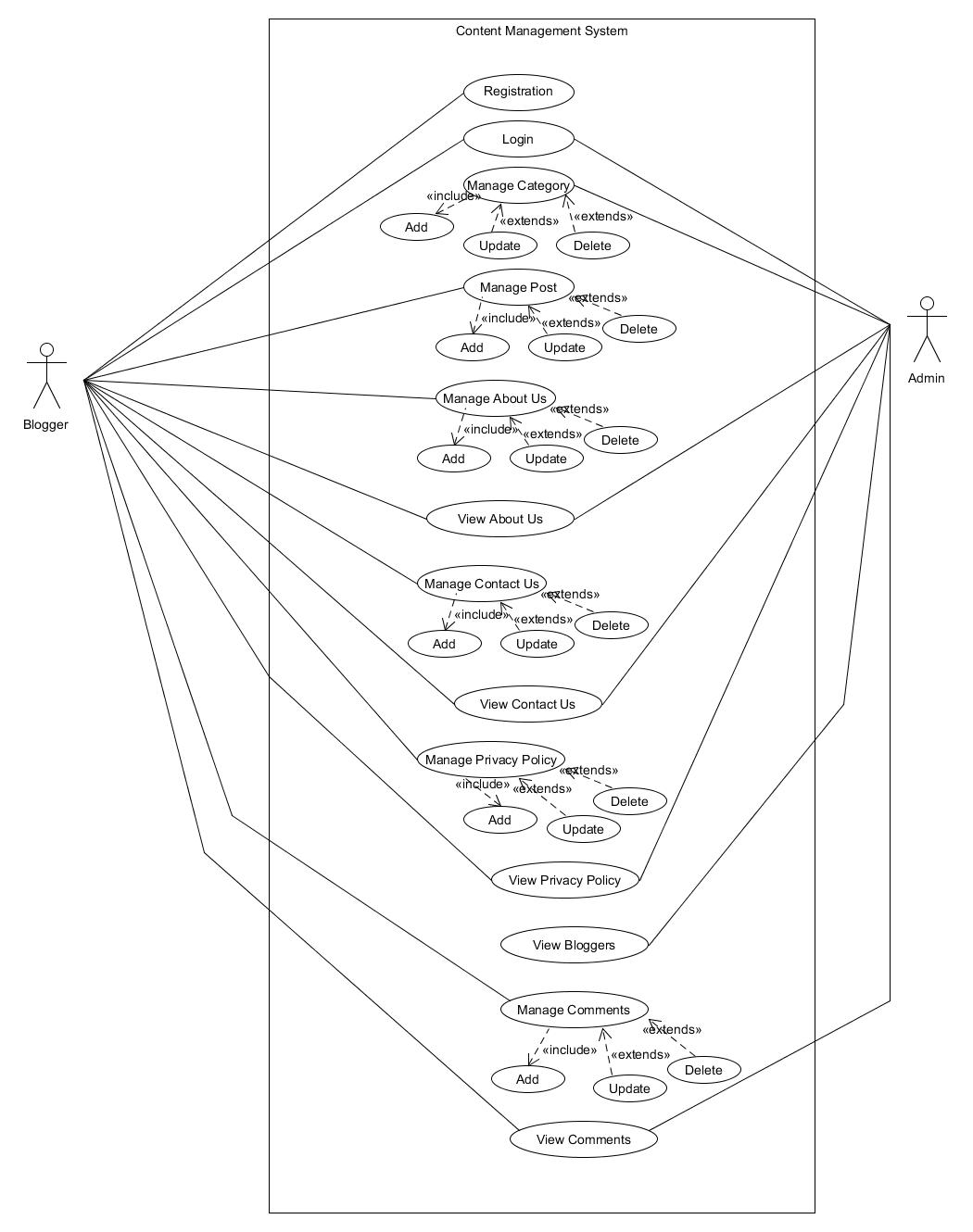
**tblprivacypolicy**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Data Type** | **Constraint** | **Description** |
| privacypolicyid | int | Primary Key | It contains unique id for privacy policy. |
| sitename | varchar(15) | Not Null | It contains the site name of privacy policy. |
| siteurl | string | Not Null | It contains the email id of privacy policy. |
| cookies | string | Not Null | It contains the cookies of privacy policy. |
| googleads | string | Not Null | It contains the google ads of privacy policy. |
| thirdpartyads | string | Not Null | It contains the third party ads of privacy policy. |

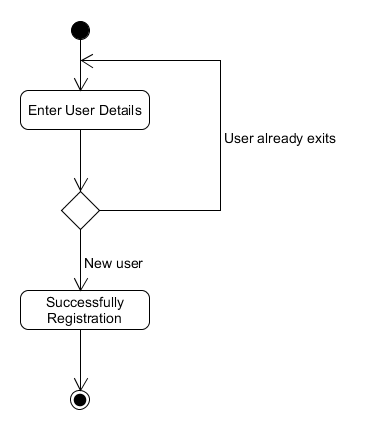
**Chapter: 5**

**System Analysis**

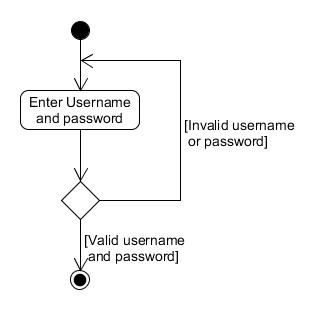
* 1. **Use Case Diagram**



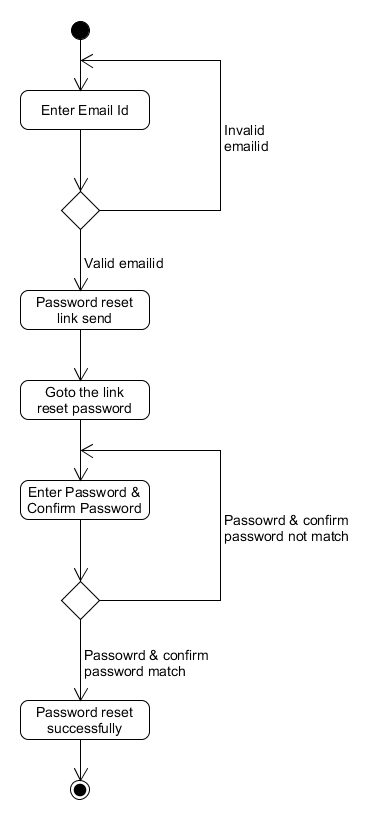
* 1. **Activity Diagram**
     + **Registration**

****

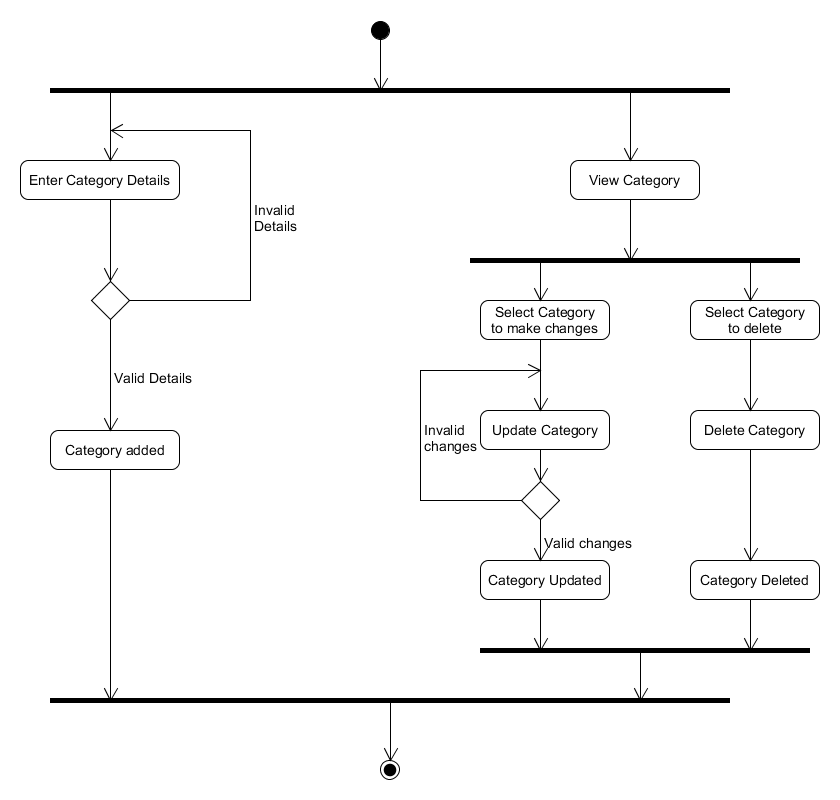
* + - **Login**

****

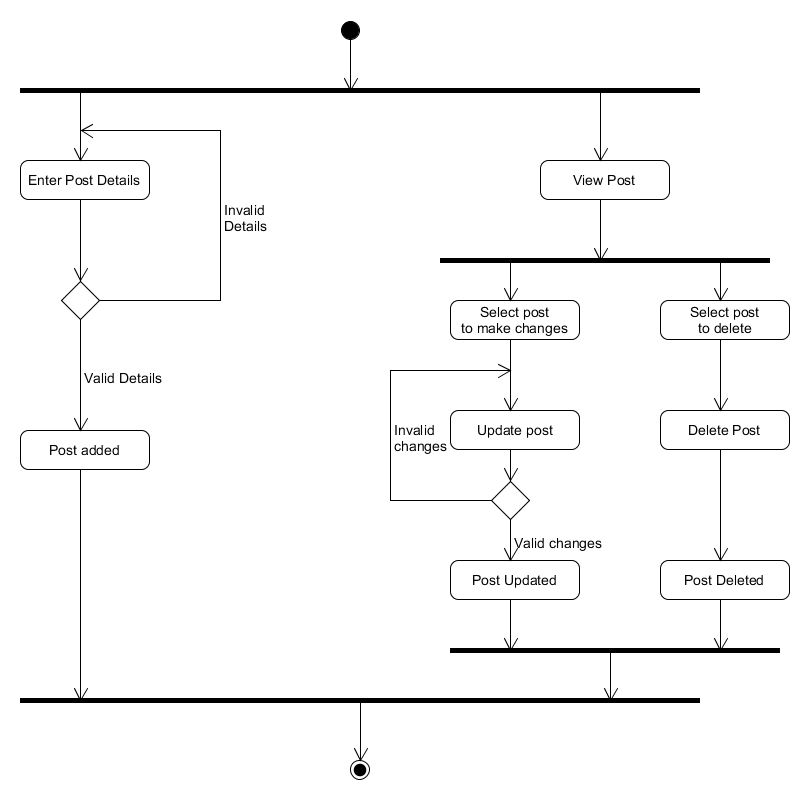
* + - **Forgot Password**

****

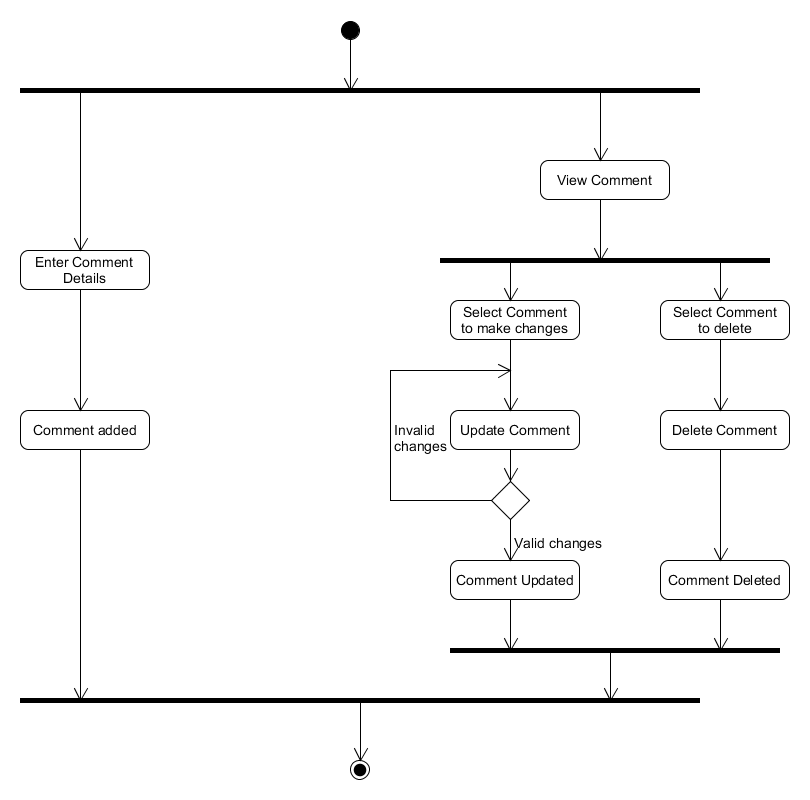
* + - **Manage Category**

****

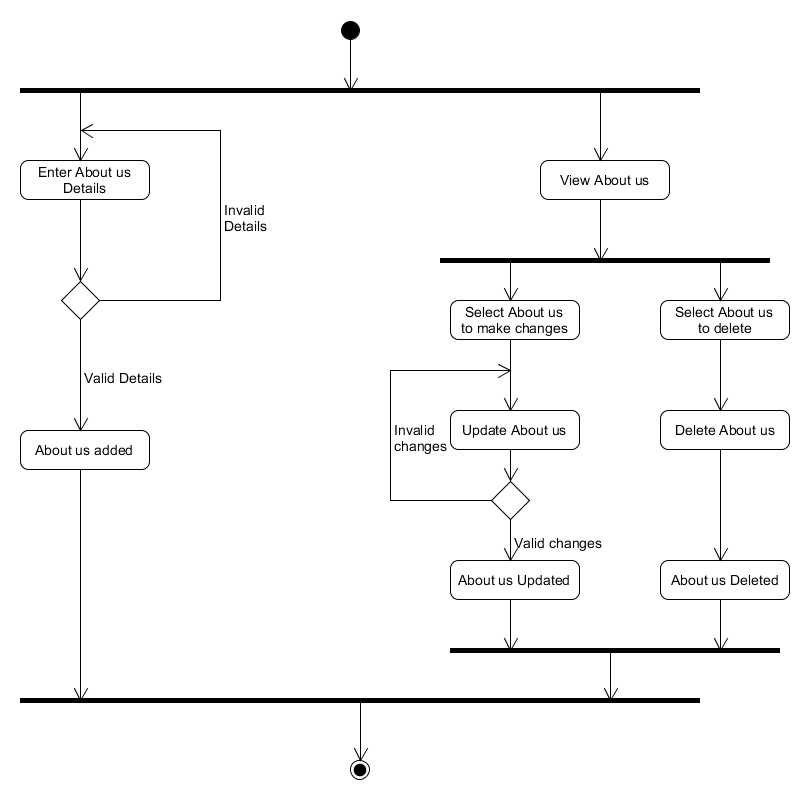
* + - **Manage Post**

****

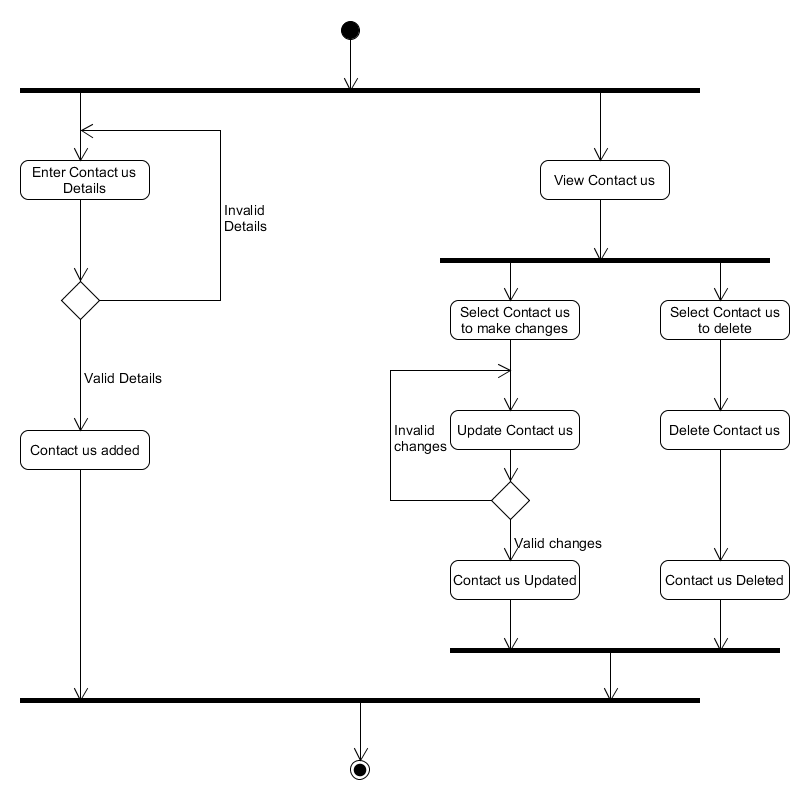
* + - **Manage Comments**

****

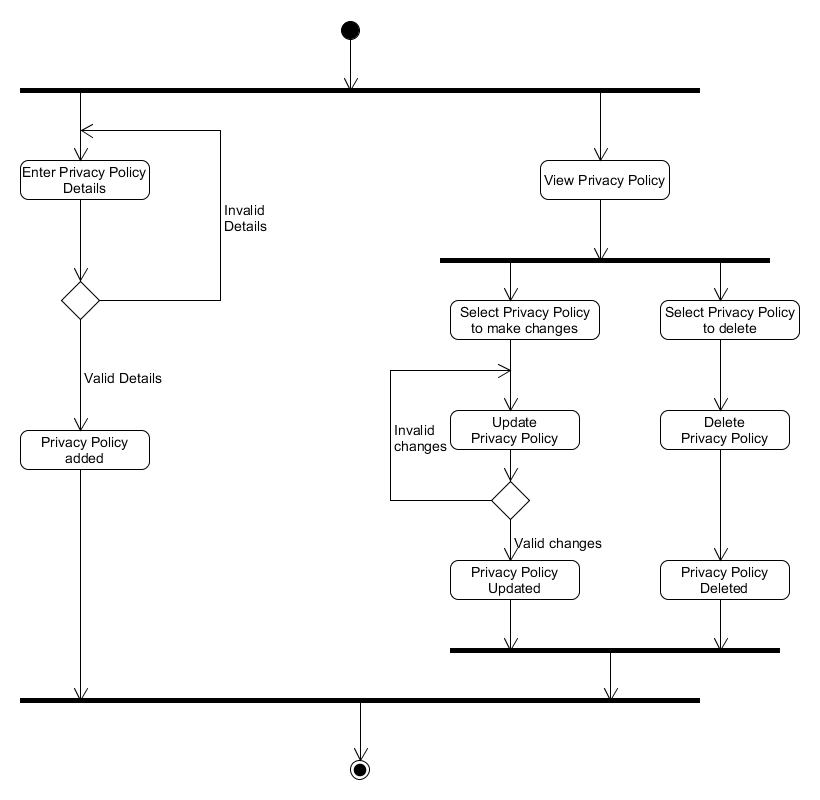
* + - **Manage About us**

****

* + - **Manage Contact us**

****

* + - **Manage Privacy Policy**

****