SUNSTONE

9. Blog Website and Application

Blog Website and Application

- A blog website allows users to opine their thoughts and comment on anything and everything. You can make a creative website or application using full-stack technology and take inspiration from other blogs. Ensure that you add proper authentication features so individuals with valid credentials can log in to the platform.

SOFTWARE REQUIREMENTS SPECIFICATION

For

Blog Website And Application

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Academic Year:2023-2024

1.Introduction

1.Purpose

The purpose of a blog is to provide content on your website that answers your prospective customers' questions and helps them learn about your product or service. It expands your brand's visibility by giving Google and other search engines content to index and serve up in search results.There are many benefits to having a blog on your website. Read on to learn why we encourage our clients to have a blog to strengthen their online presence.

2.Document Conventions

➢Entire document should be justified.
➢Convention for Main title
   Font face: Times New Roman Font style:Bold
   Font Size: 14
➢Convention for Sub title
   Font face: Times New Roman Font style: Bold
   Font Size: 12
➢Convention for body
   Font face: Times New Roman Font Size: 12

3.Scope of Development Project

The scope of blogging is bright as more and more users are getting access to the internet and computers. In all type of offices the computer is a necessary part so visitors browse the internet to have solution of their problems. So the bloggers have to keep eye in the future and have to write in some different way that is not common to other blogs. People always looking for new techniques and words. Give your visitors a new way of reading and not boring content.

4.Definitions, Acronyms and Abbreviations

JAVA -> platform independence
SQL-> Structured query Language
ER-> Entity Relationship
UML -> Unified Modeling Language
IDE-> Integrated Development Environment
SRS-> Software Requirement Specification
ISBN -> International Standard Book Number
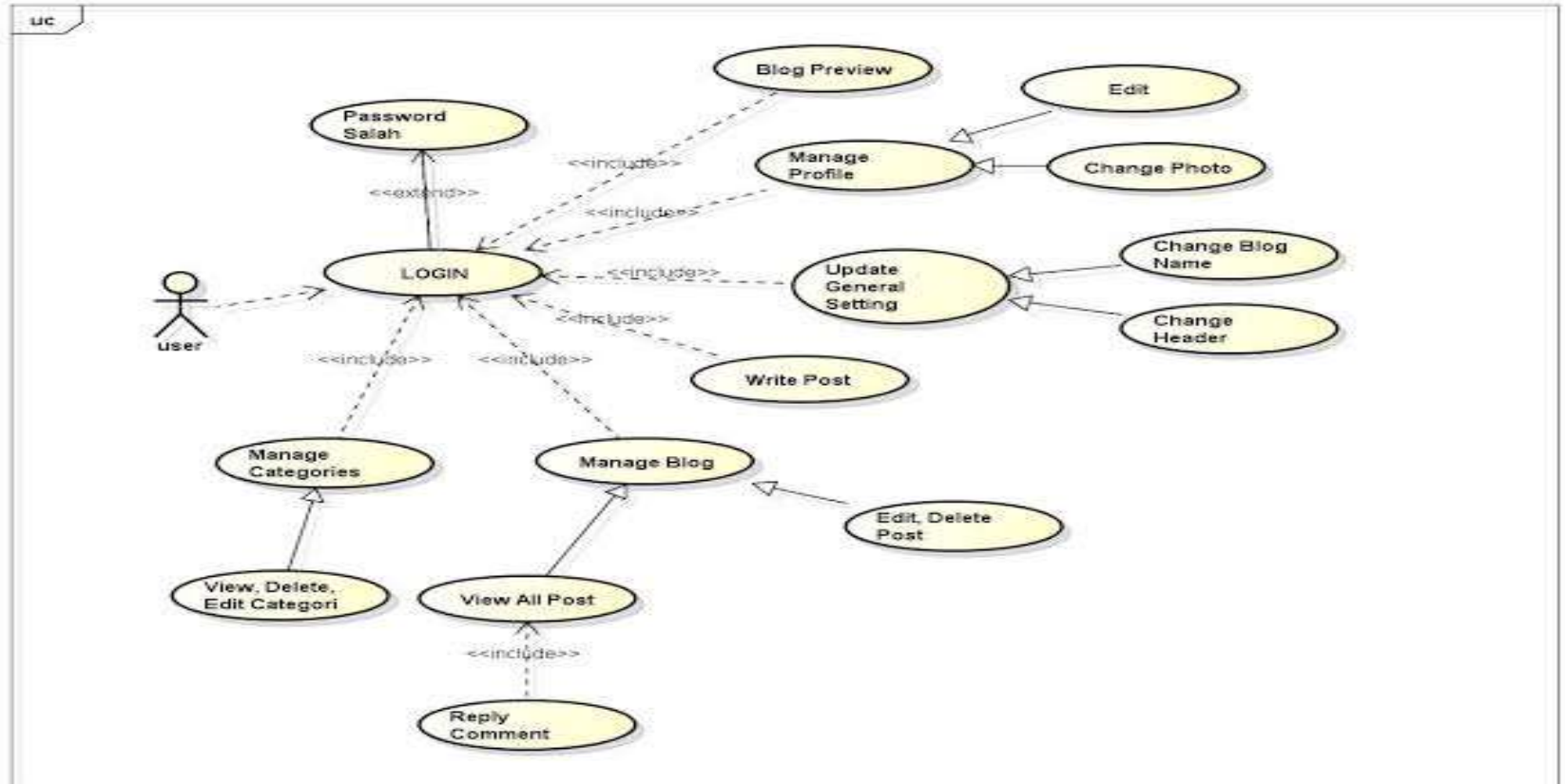IEEE ->Institute of Electrical and Electronics Engineers

5.References

➢Books

Software Requirements and Specifications: A Lexicon of Practice, Principles and Prejudices (ACM Press) by Michael Jackson
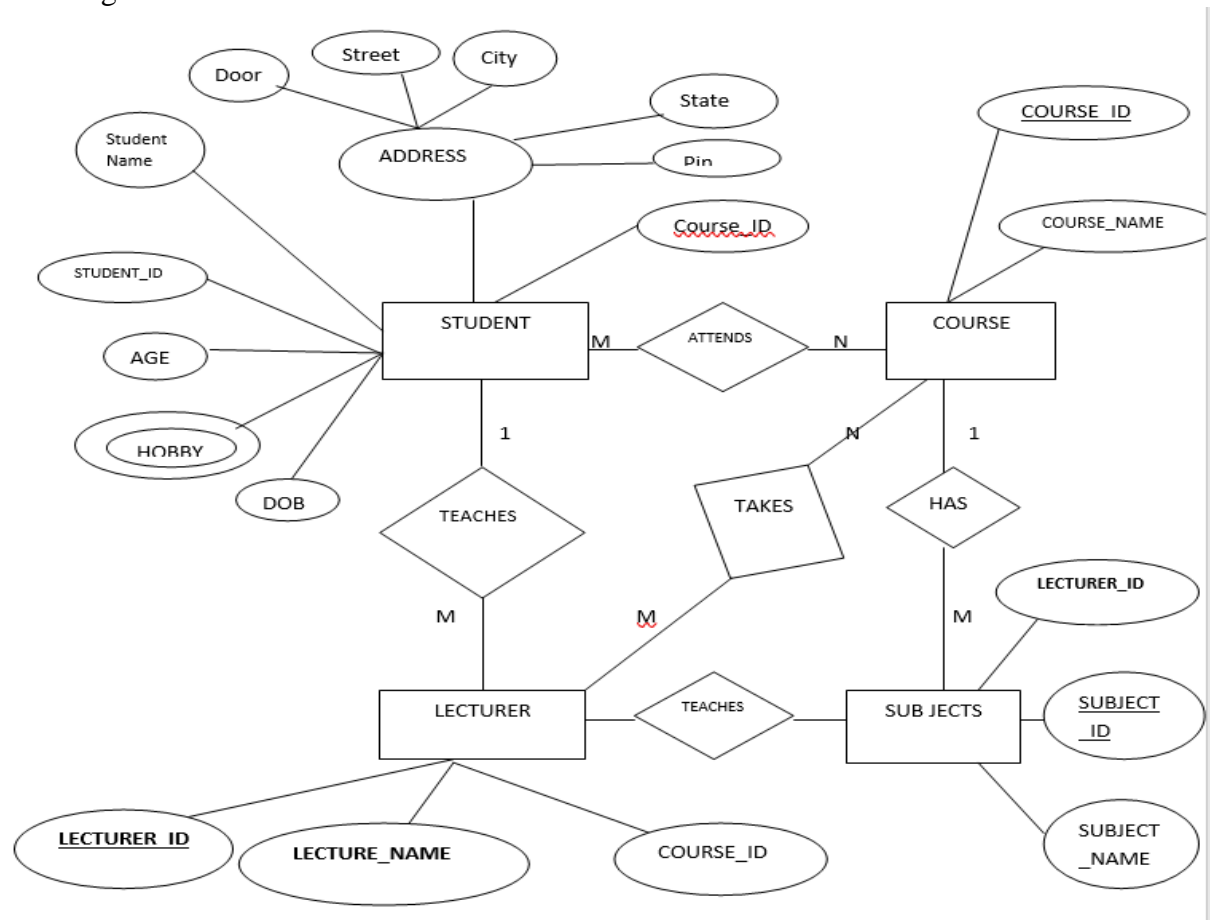Software Requirements (Microsoft) Second EditionBy Karl E. Wiegers

2.Overall Descriptions
1.Product Perspective
Use Case Diagram of Blog Website

2.2 Product Function

Entity Relationship Diagram of Blog website

2.3 User Classes and Characteristics

It A blog website is a platform that allows users to create, publish and share articles or blog posts with an online audience. It typically consists of a series of articles arranged in reverse chronological order, with the most recent posts appearing first.Here are some characteristics and use cases of blog websites:

➤ **Personal blogging**: Many individuals use blog websites to share their personal experiences, thoughts, and opinions on a variety of topics. Personal bloggers often use their blog as a creative outlet or to connect with others who share similar interests.

➤ **Business blogging**: Businesses can use blog websites to promote their products or services, provide helpful information to customers, establish thought leadership, and drive traffic to their website.

➤ **News and journalism**: Many news websites use blog-style formats to publish breaking news stories, feature articles, and opinion pieces. Blogging can be an effective way to deliver news content in a more personal and engaging format.

➤ **Education and teaching**: Educators and teachers often use blog websites as a platform to share their expertise, provide educational resources, and engage with students and other educators.

➤ **Hobby or niche blogging**: Blogging can be a great way to share information, tips, and experiences related to a specific hobby or niche interest, such as cooking, gardening, travel, or fashion.

2.4 Operating Environment

The operating environment of blog websites includes various components such as the web server, database server, content management system (CMS), web browser, internet connection, and operating system. The web server provides the platform for hosting the website, while the database server stores and retrieves blog content and user information. The CMS allows users to create, publish, and manage blog posts, comments, and other content. The web browser enables users to access and interact with the blog website.

3.Requirement

Software Configuration:

➢ Web Server: Apache or Nginx

➢ Programming Language: PHP, Python, Ruby, or Node.js

➢ Content Management System (CMS): WordPress, Drupal, Joomla, or Ghost

➢ Database: MySQL or PostgreSQL

➢ Cache: Redis or Memcached

➢ Operating System: Linux (e.g., Ubuntu, CentOS, Debian)

Hardware Configuration:

➢ Processor: Dual-core or higher

➢ RAM: 4 GB or more

➢ Storage: 20 GB or more

➢ Bandwidth: 100 GB or more per month

➢ Network: Gigabit Ethernet

Non-functional Requirements

1.Performance Requirement

➤ **Speed**: Users expect websites to load quickly. Slow loading times can lead to frustration and abandonment of the site. Therefore, it's essential to optimize the website for speed by minimizing the size of images and other media, using caching techniques, and leveraging content delivery networks (CDNs) to reduce latency.

➤ **Responsiveness**: A blog website should be designed to be responsive across different devices and screen sizes. Users should be able to access and navigate the site on desktops, laptops, tablets, and smartphones without any difficulty.

➤ **Security**: A blog website should be secure from cyber threats, such as hacking, malware, and phishing attacks. It's crucial to keep the website's software and plugins up to date, implement SSL/TLS encryption, and enforce strong password policies. Additionally, regular backups should be taken to mitigate the impact of any security breaches.

2 .User Requirement

The users of the system are members and blog creater of the blog who act as administrator to maintain the system. The members are assumed to have basic knowledge of the computers and internet browsing. The administrators of the system should have more knowledge of the internals of the system and is able to rectify the small problems that may arise due to disk crashes, power failures and other catastrophes to maintain the system. The proper user interface, user manual, online help and the guide to install and maintain the system must be sufficient to educate the users on how to use the system without any problems.The admin provides certain facilities to the users

3. Technical Requirements

The technical requirements for blogging software are much more specific than what you'd need for a typical Web site. Most blog software use a mix of several kinds of Web server technology that are ideal for running dynamic Web sites like blogs. The following technologies are considered the bare minimum that most blogging packages need to   function:

MySQL: MySQL is the most popular database software for blogs. For any blogging package, you need some kind of database system to store all your blog posts and run the other functionality of the blog software.

Linux: Linux is a common Web server operating system. This stable operating system is considered a standard for Web servers. As a blogger, you won't be doing too much to the operating system, as long as it's in place for you.

Apache: Apache is Web-page-serving software, which means it looks at what Web page is requested and then feeds the browser the appropriate file. It does most of the hard work of serving Web pages to visitors coming to your Web site.

PHP: PHP is the programming language that a lot of blogging and content management systems use. It sits between the blogging software and the database, making sure all the parts work together.

4.Safety Requirement
A blog website should implement safety measures such as regular backups, SSL certificate for encryption, strong password policies, and use of security plugins to prevent hacking attempts, spam comments, and malware infections. It should also provide clear guidelines for user-generated content and follow relevant data protection regulations. Additionally, having a clear and visible terms of service and privacy policy, as well as providing tools for users to report inappropriate content, can help create a safe and positive environment for all.
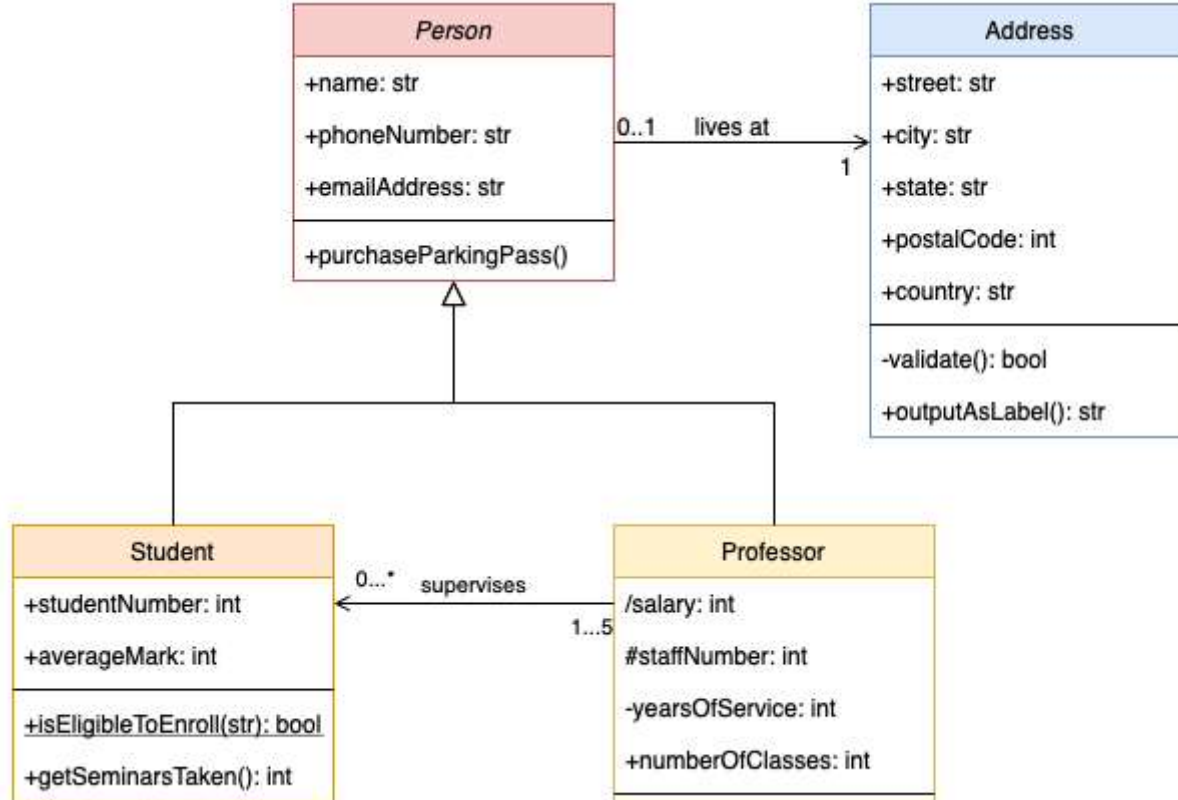
4.Glossary

The following are the list of conventions and acronyms used in this document and the project as well:

➢Administrator: A login id representing a user with user administration privileges to the software

➢User: A general login id assigned to most users

➢Client: Intended users for the software

➢SQL: Structured Query Language; used to retrieve information from a   database

➢SQL Server: A server used to store data in an organized format

➢Layer: Represents a section of the project

➢User Interface Layer: The section of the assignment referring to what the user interacts with directly

➢Application Logic Layer: The section of the assignment referring to the Web Server. This is where all computations are completed

➢Data Storage Layer: The section of the assignment referring to where all data is recorded

➢Use Case: A broad level diagram of the project showing a basic overview

➢Class diagram: It is a type of static structure diagram that describes the structure of a system by showing the system's cases, their attributes, and the relationships between the classes

➢Interface: Something used to communicate across different mediums

➢Unique Key: Used to differentiate entries in a database

5.Class Diagram

Blogging System Class Diagram describes the structure of a Blogging System classes, their attributes, operations (or methods), and the relationships among objects. The main classes of the Blogging System are Blog, Blog Category, Create Blog, Blog Type, Comment, Technology Blog.

Person *(abstract)*
- +name: str
- +phoneNumber: str
- +emailAddress: str

- +purchaseParkingPass()

Address
- +street: str
- +city: str
- +state: str
- +postalCode: int
- +country: str

- -validate(): bool
- +outputAsLabel(): str

Person 0..1 — lives at — 1 Address

Student
- +studentNumber: int
- +averageMark: int

- +isEligibleToEnroll(str): bool
- +getSeminarsTaken(): int

Professor
- /salary: int
- #staffNumber: int
- -yearsOfService: int
- +numberOfClasses: int

Professor 1...5 — supervises — 0...* Student

Blog Website Hands on

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