

# Blog Lite

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## 1 Introduction

Blog Lite is a Social Network Site (SNS). It is a social media web application built using Python-Flask, SQLAlchemy, HTML and CSS. It provides a platform for blog writers and readers to post and view blogs of other Blog Lite users.

## 2 Technologies Used

### 2.1 Python-Flask

It is a web framework written in Python implemented on Werkzeug and Jinja2. Flask was used for back-end framework.

### 2.2 SQLite and SQLAlchemy

SQLite is a database engine written in the C programming language. It was mainly used for storing data of the web application.

SQLAlchemy is a Python SQL toolkit and Object Relational Mapper used for data access and manipulation.

### 2.3 HTML and CSS

HTML is a markup language used for creating web pages and CSS is used for web page styling. HTML and CSS make the backbone of front-end development of Blog Lite.

## 3 Models Used

### 3.1 UserDetails

It is a class that represents the user personal and user credentials data. It contains the attributes: First Name, Middle Name, Last Name, Date of Birth, Email, Username, and Password. The Primary Key is the Username and all attributes are non-null able. Further, Username, Password and Email is unique.

### 3.2 Posts

It is a class that represents the information of posts created by various users. It contains the attributes: Post ID, User, Title, Description, Content, Date. The Primary Key is the Post ID, which is incremental and unique. The Foreign Key in the User which is the primary key (Username) in User Details model and all attributes are non-null able.

### 3.3 Image

It is a class that represents the information of images attached in the blog posts created by various users. It contains the attributes: Image ID, Post ID, Image Path. The Primary Key is the Image ID, which is incremental and unique. The Foreign Key in the Post ID which is the primary key in Posts model and all attributes are non-null able.

### 3.4 Follow

It is a class that represents the data of user followers. It shows which user followed whom. The attributes are User and Following. Both attributes are Foreign Keys, which is the primary key (Username) in User Details model and all attributes are non-null able.

### 3.5 Like

It is a class that represents the data of users and their liked posts. It shows which user liked which post. The attributes are 'p\_id' (Post ID) and 'by' (User who liked it). Both attributes are Foreign Keys, which is the primary key (Post ID) in Posts and (Username) in User Details model respectively.

### 3.6 PostAPI

It is a class with four functions: get, post, put and delete to perform CRUD operations on Post. It is applicable for urls: api/user\_name/p\_id and /api/user\_name, where user\_name and p\_id are parameters.

### 3.7 UserAPI

It is a class with four functions: get, post, put and delete to perform CRUD operations on User. It is applicable for urls: /api/user/user\_name, where user\_name is a parameter.

## 4 System Design

