# INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, ALLAHABAD Software Engineering

Instructor: Shekhar Verma Sir

## SOFTWARE DESIGN SPECIFICATION For

# BLOGR A WEB APPLICATION FOR BLOGGING

#### **Group Members:**

IIT2019127	MRIDUL MITTAL	<u>iit2019127@iiita.ac.in</u>
IIT2019145	PARAS AGRAWAL	iit2019145@iiita.ac.in
IIT2019146	KSHITIJ KUMAR	iit2019146@iiita.ac.in
IIT2019148	PIYUSH GURJAR	iit2019148@iiita.ac.in

#### **Section 1: Introduction:**

The Software Design Document is a document to provide documentation which will be used to aid in software development by providing the details for how the software should be built. Within the Software Design Document are narrative and graphical documentation of the software design for the project including use case models, sequence diagrams, collaboration models, object behaviour models, and other supporting requirement information.

#### 1.1 Purpose:

This document will define the design of the one runway simulator. It contains specific information about the expected input, output, classes, and functions. The interaction between the classes to meet the desired requirements are outlined in detailed figures at the end of the document.

#### 1.2 Scope:

We have described what features are in the scope of the software and what features are not in the scope of the software.

#### <u>In scope:</u>

- A. Search blogs with the help of author name or tags across our whole website
- B. Can bookmark the blogs which we want to.
- C. Can access blogs in both audio and text format
- D. Can store data in databases

#### Out of Scope:

- A. No communication via this application.
- B. Cannot see the drafted blogs of the author.

#### 1.3 Definitions, Acronyms, and Abbreviations:

Acronyms, and Abbreviations:

★ SDS: Software Design Specification

★ IEEE: Institute of Electrical and Electronics Engineers

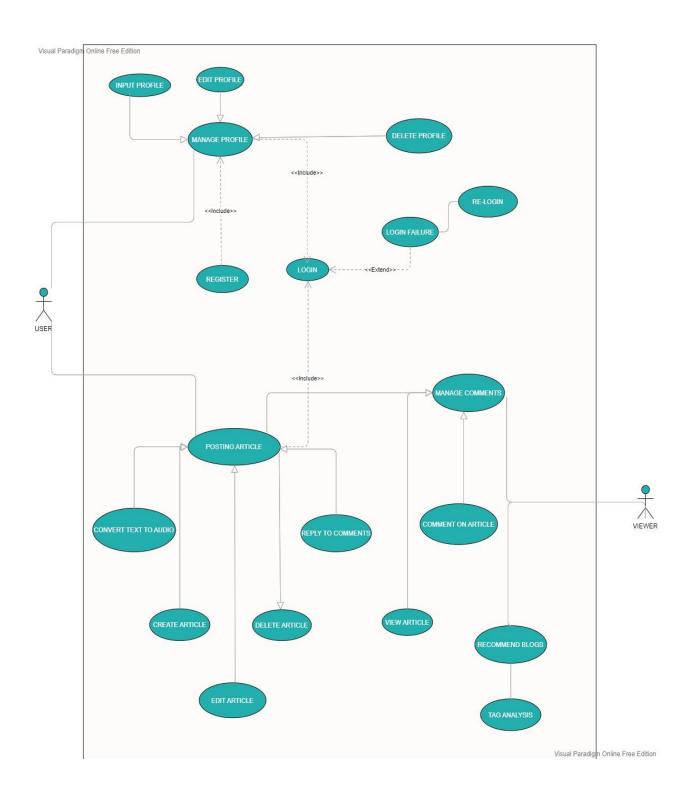
#### Definitions:

"Blogr" is basically a web application, which provides user a platform to share his ideas with the whole world in form of text/audio. It is a blogging website with additional features to maximize the learning capabilities of the user.

#### 1.4 References:

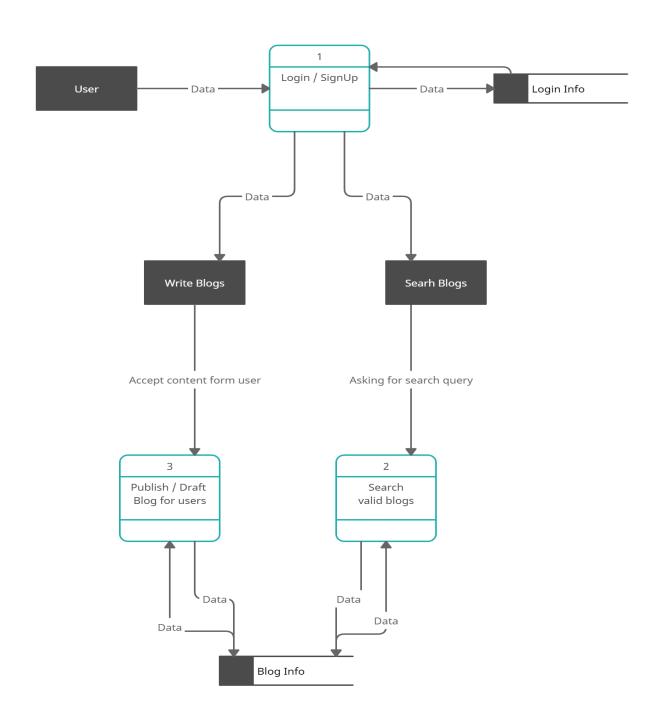
- ★ IEEE SDS format
- ★ R. S. Pressman, Software Engineering: A Practitioner's Approach, 5th Ed, McGraw-Hill, 2001.

### Section 2:Conceptual Architecture/Architecture Diagram 2.1. Use Case Diagram

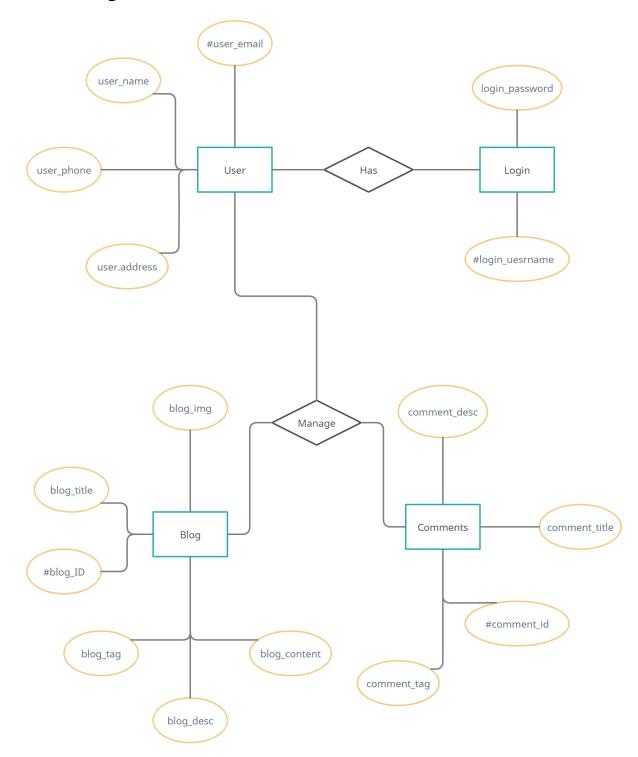


#### **Section 3: Logical Architecture**

#### 3.1. Data Flow Diagram



#### 3.2. ER Diagram



#### 2.1. Use Case Diagram

A use case diagram is a graphical depiction of a user's possible interactions with a system. A use case diagram shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses. The actors are often shown as stick figures.

#### 3.1. Data Flow Diagram

Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation.

The user is an entity which is asked for login information. In case of registration details are taken as input and stored in the database using a data store.

In case of login the input credentials are checked in the database using login info data store. The user is then redirected to the search page of the website.

The input query is searched for various blogs in the database the user can also access the database to create new diagram

This data is then displayed to the user

#### 3.2. ER Diagram

Entity Relationship Diagram (ERD), a database design tool that provides graphical representation of database tables, their columns and inter-relationships. ERD is the most popular database design tool. A well-developed ERD can provide sufficient information for database administrators to follow when developing and maintaining a database.

We have a separate database for each social media platform which stores its basic information such as name, number of posts with primary key as name. We also have a common database table which stores user login credentials used for the login signup page.