Stackoverflow Clone

Systems Requirement & Design Document

Table of Content

1. Introduction

1.1.   Purpose

This document describes high level functional and technical requirements along with design for Stackoverflow clone project.

1.2.   Overview

Stackoverflow is well reputed a question and answer site for professional and enthusiast programmers. Here we have try to make similar site in Django with minimal functionality for learning purpose.

In the Stackoverflow Clone Project, there will be multiple landing pages through which end user can interact. Whenever end user comes to the site, user will be redirect to login page if s/he is not logged in. For the new user, we have created Signup landing page through which user will register to the site.

Once the user login, S/he would be redirect to home page where user can find all the posted questions by community. User can answer particular question and comment on specific answer. User can upvote, downvote, set as accepted, set as favourite an answer.

1.3.   Features
- Signup with username
- Login with username and password
- Post question with title, description & tag
- Update question
- Answer a posted question
- Comment on answer
- Upvote answer
- Downvote answer
- Mark set as favorite answer
- Mark set as accepted answer
- Credit reputation point to user on post question
- Credit reputation point to user who has posted the answer and the answer set as upvoted

1.4.   Additional Features

- Signup with inbuilt Django Authentication
- Simple UI for better unit testing
- Validation in upvote, downvote, favorite, accepted answer (Only one time click per user per answer

1.5.   Techstack Used

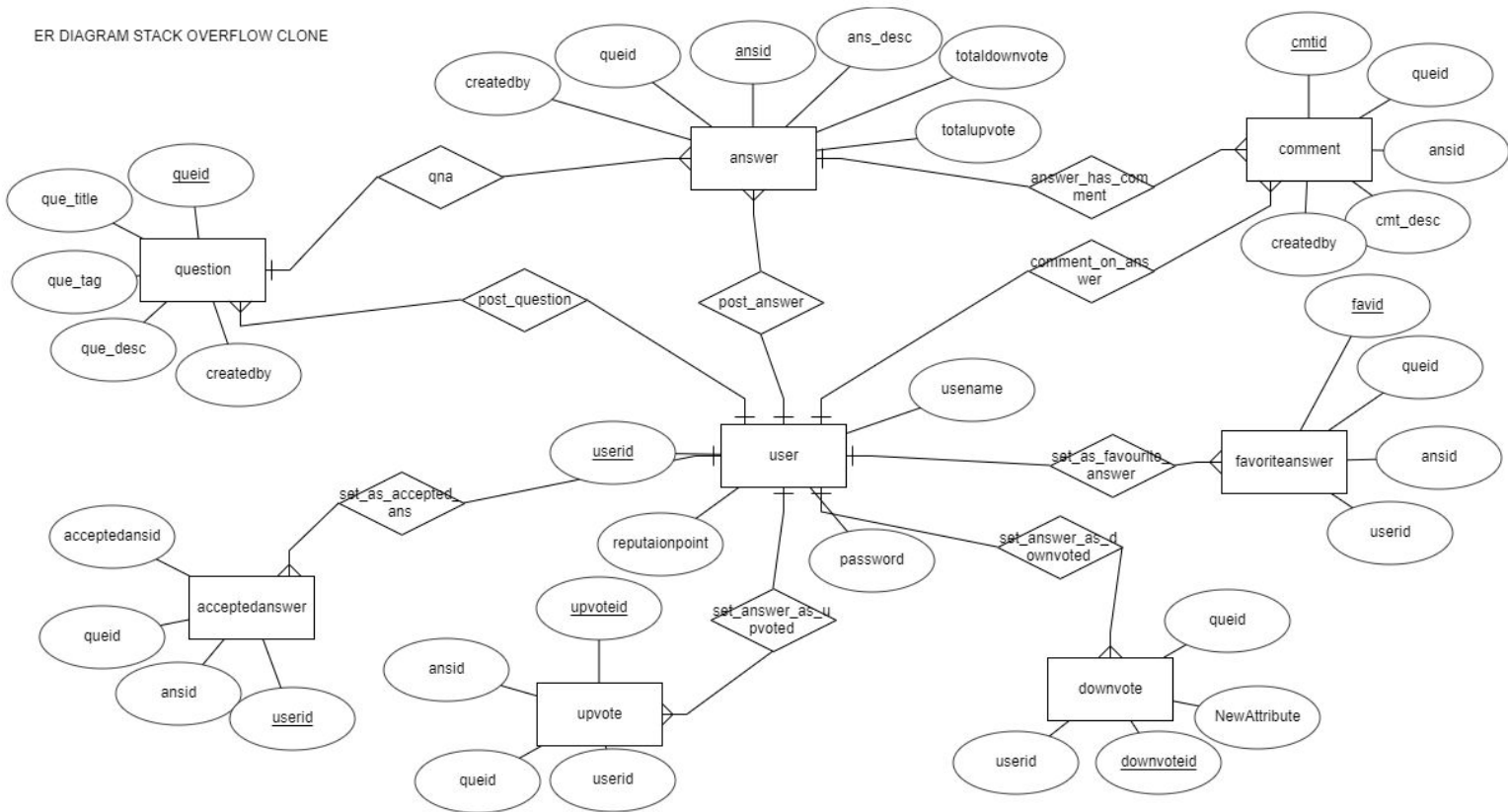This section describes list of tackstack used in the project.

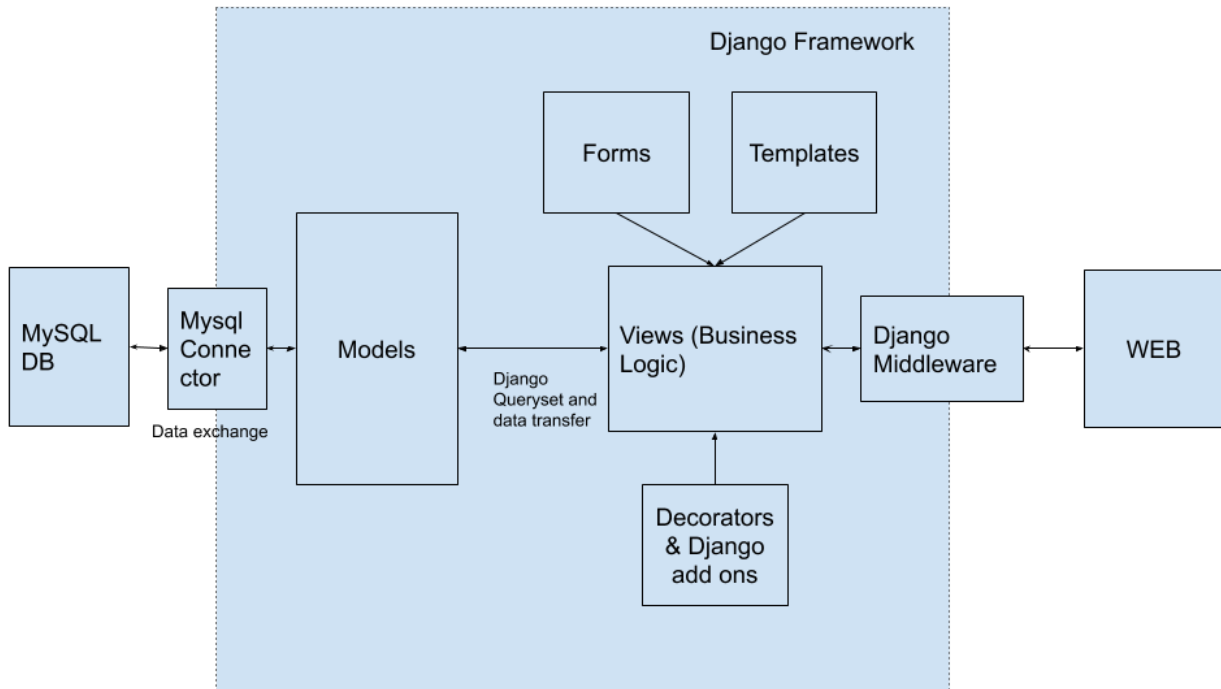| Techstack	Purpose
Python	Django Framework language
Django	Python web framework
MySQL	Database
mysql-client	Django MySQL connector library
django-crispy-forms	Automatic form creation django library

2. Technical Details

2.1. ER Diagram

https://drive.google.com/file/d/1231TusyzUPYhBS8T7DyljdV5Pw6gNYyG/view?usp=sharing

ER DIAGRAM STACK OVERFLOW CLONE

2.2. Technical Architecture Diagram

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Architecture Diagram Stackoverflow Clone

3. Data Model

3.1.   Models

This section describes details on all the data models used in Stackoverflow Clone.

Field	Datatype	comments
Userprofile Model extends properties of Django inbuilt **User Model**		
user	object	User
reputationpoint	int	

Question Model		
queid	int	pk
que_title	char	
que_desc	text	
que_tag	char	
createdby	object	fk (Userprofile)
createdon	datetime	
updatedon	datetime	

Answer Model		
ansid	int	pk
queid	object	fk (Question)
ans_desc	text	
total_upvote	int	
total_downvote	int	

createdby	object	fk (Userprofile)
createdon	datetime	
updatedon	datetime	

CommentOnAnswer Model		
cmtid	int	pk
queid	object	fk (Question)
ansid	text	fk (Answer)
cmt_desc	char	
userid	object	fk (Userprofile)
createdon	datetime	
updatedon	datetime	

AcceptAnswer Model		
acceptansid	int	pk
queid	object	fk (Question)
ansid	text	fk (Answer)
userid	object	fk (Userprofile)
createdon	datetime	
updatedon	datetime	

FavouriteAnswer Model		
favid	int	pk
queid	object	fk (Question)
ansid	text	fk (Answer)

userid	object	fk (Userprofile)
createdon	datetime	
updatedon	datetime	

UpvoteAnswer Model		
upvoteid	int	pk
queid	object	fk (Question)
ansid	text	fk (Answer)
userid	object	fk (Userprofile)
createdon	datetime	
updatedon	datetime	

DownvoteAnswer Model		
downvoteid	int	pk
queid	object	fk (Question)
ansid	text	fk (Answer)
userid	object	fk (Userprofile)
createdon	datetime	
updatedon	datetime	

4. Configurations and Project Set up

Please read README.md file.