Project Analysis Document

Version 1

Twitter

Team 1

|  |  |
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Revision History

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| --- | --- | --- | --- |
| **Name(s)** | **Date** | **Reason(s) For Change(s)** | **Version** |
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# **Introduction**

Twitter is a kind of sister project implemented at undergraduate level that is almost similar to popular social networking website “Twitter” in functionalities and lay out. The purpose of making this project is to come up with the social website same as original Twitter and to know how these social websites are made. This document is intended for project advisors who are lab instructors and the structure and functionalities of the project Twitter is given below.

## **Project Overview**

Twitter is a look alike to “Twitter”, the popular social networking website. It has almost all the features of Twitter except, of course, its networking implementation. In Twitter, a person can have his personal account where he can post tweets, read tweets of people he is following, follow other people and send private messages to them. Twitter is implemented using Database Management Systems and web form and Master Page using ASP.NET.

## **User Classes and Characteristics**

1. Recreational/Casual Users

These will be the common users and they will be able to do almost everything that the user of original Twitter is able to do. They will be able to follow other users and can be followed, send private messages to people they are following, will have their own public page where they would be able to tweet and will be able to read tweets of other users.

1. Public Figure

Public Figure will be those users of Twitter who will have more than a million followers and they will be given a title of Public Figure, which will be written along their name on their public page.

1. Administrator

Administrators will be the special users who will be able to view everyone’s tweet and will be able to delete the tweet of any user or even accounts.

# **Functionality Points**

1. **Functionality 1 : Signup**

|  |  |
| --- | --- |
| **Signup** | |
| **User** | Non Account Holder User |
| **Steps** | |
| a) | A user can sign up for this website by providing username, password, Full name, Email and contact number on signup.aspx page. |
| b). | If this user name is already taken a message is shown "sorry, this user name already exists. Try another" |
| c). | In case the user name is available, a new account is created and the new user Is redirected to his/her Home.aspx page. |
| **Assumptions** | username, password, Full name will be not null, Contact number can be null |

1. **Functionality 2 : Delete Own Account**

|  |  |
| --- | --- |
| **Login** | |
| **User** | Account Holder User |
| **Steps** | |
| a) | A user can delete his account. |
| b). | Ask for the email address for confirmation. |
| c). | When his account is deleted he/she will be directed signup.aspx |
| **Assumptions** | -Email address is taken to send mail on account where it will not be implemented. |

1. **Functionality 3 : Login/Logout**

|  |  |
| --- | --- |
| **Login** | |
| **User** | Admin/User |
| **Steps** | |
| a) | User can login to the website by providing username and password on Adminlogin.aspx page. |
| b). | In case incorrect user name or password is provided following message is shown "Incorrect user name or password" |
| c). | In case of correct username and password user will be redirected to his/her AdminHome.aspx page. |
| **Assumptions** | - |

1. **Functionality 4 : Can have a Public Figure**

|  |  |
| --- | --- |
| **Login** | |
| **User** | User |
| **Steps** | |
| a) | User can make his own Public Figure. |
| b). | User can link that with his account. |
|  |  |
| **Assumptions** | Public Figure is the person who has 1 lac followers. |

1. **Functionality 5 : Can Tweet many times on his Public Page**

|  |  |
| --- | --- |
| **Login** | |
| **User** | Public Figure |
| **Steps** | |
| a) | Public Figure can add as many posts and delete them. |
| **Assumptions** |  |

1. **Functionality 6 : Can Follow Other Users**

|  |  |
| --- | --- |
| **Login** | |
| **User** | User |
| **Steps** | |
| a) | User can Follow other user. |
| b). | If user is not following the other person then follow button is displayed. |
|  |  |
| **Assumptions** | Follow button is available |

1. **Functionality 7 : Can UnFollow Other Users**

|  |  |
| --- | --- |
| **Login** | |
| **User** | User |
| **Steps** | |
| a) | User can UnFollow other user. |
| b). | If user is following the other person then unfollow button is displayed. |
|  |  |
| **Assumptions** | UnFollow button is available. |

1. **Functionality 8 : Can Send Private Messages**

|  |  |
| --- | --- |
| **Login** | |
| **User** | User |
| **Steps** | |
| a) | User can send messages. |
| b). | User can receive messages. |
|  |  |
| **Assumptions** | Any one of the user is following the other. |

**9. Functionality 9 Trends:**

|  |  |
| --- | --- |
| **Login** | |
| **User** | Account Holder User |
| **Steps** | |
| a) | A user can create trends by using hash tags |
| b). | Make any number of tags |
| c). | Removed when account is deleted |
| **Assumptions** |  |

**10. Functionality 10 Add profile picture:**

|  |  |
| --- | --- |
| **Login** | |
| **User** | Account Holder User |
| **Steps** | |
| a) | A user can upload a profile picture |
| b). | Any number of times |
| c). | - |
| **Assumptions** | - |

**11. Functionality 11 Retweet:**

|  |  |
| --- | --- |
| **Login** | |
| **User** | Account Holder User |
| **Steps** | |
| a) | A user can re tweet a tweet of another user. |
| **Assumptions** | Somebody has tweeted before only then it can be retweeted. |

**12. Functionality 12 Admin Rights:**

|  |  |
| --- | --- |
| **Login** | |
| **User** | Admin |
| **Steps** | |
| a) | Admin can delete a user’s account. |
| b). | Block the account |
| c). | When his account is deleted he/she will be directed signup.aspx |
| **Assumptions** | -Email address is taken to send mail on account where it will not be implemented.  User can be reported. |

# **Database Diagram**

# **Back-End Implementation**

## **Procedures**

//List required details of your procedures in this section in the format given below.

|  |  |
| --- | --- |
| **Procedure Name : create\_account** | |
| **Functionality** | Creates a new account |
| **Purpose :** User can create new account and puts information. | |
| **Inputs** | @name varchar (20),  @path varchar (100),  @password varchar (50),  @emailid varchar (50),  @phone\_no varchar (50),  @DoB date |
| **Output** |  |

|  |  |
| --- | --- |
| **Procedure Name :** get\_tweets | |
| **Functionality** | Retrieves all tweets people who are followed by the user |
| **Purpose :** User can retrieve the tweets made by followers | |
| **Inputs** | @id1 int |
| **Output** |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Procedure Name :** get\_fcount | |
| **Functionality** | Counts the number of followers of a user |
| **Purpose :** Maintains the count of followers of a user. | |
| **Inputs** | @id2 int |
| **Output** |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Procedure Name :** get\_fby\_count | |
| **Functionality** | Counts the number of people the user is following |
| **Purpose :** Maintain a count of followers that are following the user. | |
| **Inputs** | @id3 int |
| **Output** |  |
|  |  |
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| --- | --- |
| **Procedure Name :** login\_proc | |
| **Functionality** | User login with email or phone along password. |
| **Purpose :** Allows a user to log in using either email id or phone-number, along with a password. | |
| **Inputs** | @email varchar (50)=NULL,  @phone\_no varchar (50)=NULL,  @password varchar (50), |
| **Output** | @uid int OUTPUT |
|  |  |
|  |  |
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| --- | --- |
| **Procedure Name :** refresh | |
| **Functionality** | Refreshes the public page to display any changes |
| **Purpose :** User can refresh the page in order to view the new changes made on public page. | |
| **Inputs** | @id int |
| **Output** |  |
|  |  |
|  |  |
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| --- | --- |
| **Procedure Name :** new\_tweet | |
| **Functionality** | Allows user to create an original tweet |
| **Purpose :** User can make a new tweet. | |
| **Inputs** | @u\_id int,  @text varchar (250)= 'new tweet', |
| **Output** |  |
|  | @t\_id int output |
|  |  |
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| --- | --- |
| **Procedure Name :** Follow | |
| **Functionality** | Allows a user to follow another user |
| **Purpose :** User can follow other users. | |
| **Inputs** | @uid int,  @fid int |
| **Output** |  |
|  |  |
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|  |  |
| --- | --- |
| **Procedure Name :** UnFollow | |
| **Functionality** | Allows a user to unfollow some |
| **Purpose :** User can unfollow the users he/she is following | |
| **Inputs** | @uid int,  @fid int |
| **Output** |  |
|  |  |
|  |  |
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| --- | --- |
| **Procedure Name :** sendPM | |
| **Functionality** | Allows user to send a private message to someone who is following him/her |
| **Purpose :** User can send private messages to other users which re following him. | |
| **Inputs** | @sendId int,  @recvId int,  @msg varchar(500), |
| **Output** |  |
|  |  |
|  | @flag int output |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Procedure Name :** trendset | |
| **Functionality** | Allows a user to create a new trend |
| **Purpose :** User can use # to make a new trend | |
| **Inputs** | @trend\_txt varchar(21), |
| **Output** |  |
|  | @tweetid int output,  @trendid int output,  @check int output |
|  |  |
|  |  |
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| --- | --- |
| **Procedure Name :** DPLink | |
| **Functionality** | Allows user to update his/her dp |
| **Purpose :** User can update his/her dp. | |
| **Inputs** | @usr int,  @add varchar(50), |
| **Output** |  |
|  | @dis varchar(50) output |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| **Procedure Name :** retweet | |
| **Functionality** | Allows user to retweet an existing tweet |
| **Purpose :** Retweet the tweet and share it with other users. | |
| **Inputs** | @text varchar (270),  @retweeter int,  @tweetid int |
| **Output** |  |
|  |  |
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| --- | --- |
| **Procedure Name :** BlockTweet | |
| **Functionality** | Allows a user or admin to block a tweet so that it is no longer visible |
| **Purpose :** Blocks the tweet. | |
| **Inputs** | @usr int,  @tweetid int |
| **Output** |  |
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| --- | --- |
| **Procedure Name :** BlockUser | |
| **Functionality** | Allows an admin to block a casual user so that he/she is no longer able to use twitter |
| **Purpose :** Admin blocks the user | |
| **Inputs** | @usr int |
| **Output** |  |
|  |  |
|  |  |
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## **Views**

//List required details of your Views in this section in the format given below.

|  |  |
| --- | --- |
| **View Name : eachfollowerscount** | |
| **Functionality** | Count Followers |
| **Purpose :** view for getting followers count for each user for admin | |
| **Columns** | UserID, NoOfFollowers |

|  |  |
| --- | --- |
| **View Name :FollowersName** | |
| **Functionality** | Followers names |
| **Purpose :** view to get names of all followers of all users | |
| **Columns** | UserID,FollowersName |

|  |  |
| --- | --- |
| **View Name : SenderName** | |
| **Functionality** | names of the sender |
| **Purpose :** view for getting names for all senders | |
| **Columns** | SenderName,ReceiveId,Message |

|  |  |
| --- | --- |
| **View Name : SenderReceiverName** | |
| **Functionality** | Names of senders and receivers |
| **Purpose :** view for getting names for all senders and receivers | |
| **Columns** | SenderName,ReceiverName,Message |

|  |  |
| --- | --- |
| **View Name : ReceiverName** | |
| **Functionality** | Names of the receiver |
| **Purpose :** view for getting names for all receivers | |
| **Columns** | SenderId,ReceiverName,Message |

## **Triggers**

// List required details of your Triggers to be used.

|  |  |
| --- | --- |
| **Tigger Name: UpdateInfo** | |
| **Functionality** | Updated user information |
| **Purpose :** If a user updates information then trigger is generated. | |
| **Trigger type** | Update |
| **DB Query** | DML(Update) |
| **Columns affected** | User table (update to new value) |

# **Appendix A: Glossary**

Account Holder User is also taken as normal user and as well as admin and public figure.