**1 Usage Scenario :**

**1.1 Domain Management:**

In this news clustering application, there will be five domains initially. They are top stories, world, local, business and sports. Application will bring news headlines on newses and will show in the proper domains. Headlines will work as links to the news contents. If user selects a news, he or she will see more headlines from more newspaper on that news.When user selects a headline, application will show news content from the newspaper to which the headline belong. Application will also show the newspaper name. User will also see the time passed after the news was published.

Introduction to domains are given below:

**1.1.1 Top stories:** In this section, user will get the top headlines on the remaining domains that are world, local, business, sports. Application will show two or three breaking news news headlines on active domains.

**1.1.2 World:** In world domain, user will see the news headlines on world happenings.

**1.1.3 Local:** In this section, application will provide local news for users. Local domain will include news related to happenings inside user’s country.

**1.1.4 Business:** In business, user will get news headlines on business issues.

**1.1.7 Sports:** In sports domain, user will see news headlines related to sports.

**1.2 Preference Management:**

**1.2.1 Newspaper Section:** User might have preferred newspapers. In this application, user can select a newspaper from a list of newspapers. To select a newspaper, user has to sign in with his or her account to set a preferred newspaper. If user has a selected newspaper, application will mostly bring newses from that source. User may want to block a specific newspaper. If user block a newspaper, application won’t bring any news from that newspaper.

**1.2.2 Language Selection:** User can select a language in this application. There will be two language: Bengali and English. If user select a language from these two, application will show news in that language.

**1.2.3 Domain Section:** There will be top stories, world, local, business and sports default domains in the application. User may want to get newses from different domains besides default domains. In this subsystem section, user can add a domain from a list of domains. Application will fetch newses regarding the selected domains. User can remove a domain that was previously selected by him or her. To select or remove a domain, user has to sign in first.

**1.3 Authentication:**

To set preferences in this application, User has to sign in first. And so authentication part is needed. Authentication subsystem is consist of three parts. These are Sign Up, Sign In and Sign Out.

**1.3.1 Sign Up:** First user has to sign up and create an account. To create an account, user has to give their email id or phone number and has to set a password for the application. Password will be of at least 6 character long. User can not use previous account email id or phone number to create new account. Application will verify whether the provided email id or phone number and password are valid or not. If email id or phone number and password are valid, user will get a message in a pop up window saying successfully signed up. If user doesn’t provide valid email id or phone number then application will show a message in a pop up window saying email id or phone number is not valid. If the given password length is less than 6 character, application will show a message in a pop up window saying password has to be at least six character long.

**1.3.2 Sign In:** In order to sign in, user must provide email id or phone number and password. If email id or phone number and password match with the email id or phone number and password that user used to create that account, then user will be signed in the system. If given email id or phone and password doesn’t match with the email id or phone number and password that he/she used to create that account, a pop up window will appear showing incorrect field.

**1.3.3 Sign Out:** User can sign out at any time after sign in. If user signs out he/she will no longer see their prefered domain or newses from prefered newspaper.

**1.4 Search:** User can search any news by keywords. For this, sign in is not required. If keyword doesn’t match with any news content, application will show a window that will contain some suggestions to search properly. If keyword matches with any news content, application will fetch news headlines on that topic and will show them.