Automated News Reporting Agency	18B-047-CS 18B-087-CS 18B-093-CS 18B-130-CS

Feature List

Features are defined in four areas (input, output, process, and nonfunctional requirements)

Inputs (Users, External, Internal)

External Inputs:

- The different URLs of news channel's website, that admin would be feeding in, from where data would be scrapped
- The search query given by any user who wants to search for any past news.

Internal Inputs:

- The content stored in database which would later be used for synthesize of news.

User:

- As an admin, I can log in or sign up so I can access the main menu & provide system with URLs
- As a user, I can either watch news or search for any previous news
- As a product owner, I want to figure out a strategy for how we'll customize our backend so that it doesn't break with future community upgrades

  For admin logging or signing up into the system, following would be the conditions:
  - ✓ locked out after 3 failed attempts
  - ✓ password must contain a digit, an uppercase letter and be at least 8 characters —user can choose a "remember me" option

Process (different steps of the project)

As a user:

- The user has to type the name of website (i.e. our website) on the search engine or the URL in the header in order to gain access of the desired page.
- Once the page is loaded the user can view live transmission or any past stream of desired time by just searching in the search box.

As an Admin:

- The admin will login/sign up in to the system
- The admin will select the desired URLS.
- The admin will take care of the system's maintainability/security (such as inspecting audit trail etc.)

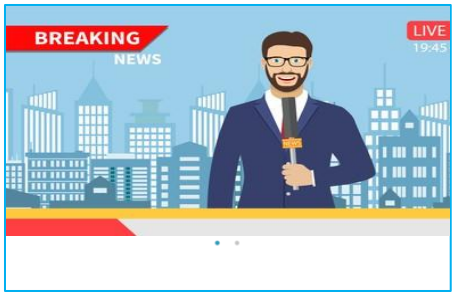
As a System:

- System will fetch the data from the URLS and store in the database
- After storing in the database, the process of synthesizing and sanitization will occur (in which data from many websites will be cleaned and only useful data will be saved in the database)
- After the above process the data will be summarized and converted into text to speech form before presenting.

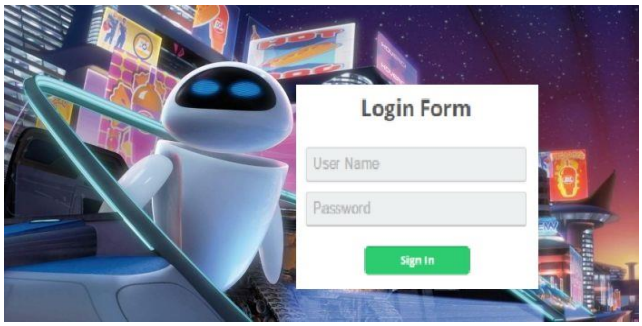
Output (Reports, Outcomes, Responses)

The output of our system is divided into 2 parts; the front & the back end

For the Front end part:
A user can watch the news broadcasted to them by the news reporting website along with the ability to search for any news simultaneously



For the back end part: There would be a login/Sign up Page for the management team of the agency. The particular admin would login after which he/she would be directed to the Main (Home) page from where they can then select & apply the desired changes (such as selecting website links for data scrapping).



Non-Functional Requirements

Following steps would be taken to ensure the fulfillment of the non-functional requirements:

- The system provides an easy to use design for the user (customer). The UI would be simple, there won't be any complex controls and the navigations in the website would be stress free.
- The system is Portable. Any user who wants to use our system doesn't need to have any special hardware or software element. The user simply has to navigate to our website and he can watch the broadcasted news or search for any news.
- Although for the time being we're making this project on small scale but as we expand this idea to other fields we need to increase its reliability as well because with expansion more and more news content would be used for synthetization and sanitization (thus need to update the system accordingly then)
- Different steps would be taken to make the system secure. To ensure security of the admin side we would make sure the use of strong passwords and counter measure in case the password is forgotten. Moreover we would be using the process of audit trailing to ensure further security (such as of database). The system would only be accessible to registered admins and no one else. Thus steps would be taken to define the access controls.
- CI/CD will be practiced to deliver production ready resources to the end user during Development.
- To improve performance of the system we would be using different optimization techniques for the algorithms.
- We will try to decrease the coupling for our software as much as possible using different techniques such as encapsulation, abstraction, using intermediaries etc.

Supervisor Name and signature