Newsfast

UCD MSc. Practicum 2015 - Black Team

Mid-Project Presentation 30th June

Project Vision

- Collects Technology News stories from multiple sources
- Personalizes the news for the user, and shows twitter reaction to the news
- Both historical tweets and streaming tweets are shown with the article
- The basic (non personalized) web site will collect news from many sources, and order the news based on what is the latest with input from twitter

Technologies Stack

What are the key technologies you are using and a brief description as to why we are using them?

Technologies Used

- Bootstrap
- jQuery
- AJAX
- Celery
- Django
- Docker
- git
- Nginx
- Postgres
- Redis
- Selenium

Bootstrap

Bootstrap (front-end framework) is a free and open-source collection of tools for creating websites and web applications.

It helps us:

- Build the user interface as it contains HTML CSS-based design templates

- Optional JavaScript extensions

- Allows the buiding of a dynamic website

jQuery

jQuery is a cross-platform JavaScript library designed to simplify the client-side scripting of HTML. jQuery is the most popular JavaScript library in use today

It helps us:

- Separate JavaScript and HTML

- To promote brevity and clarity with features like chain-able functions

- Eliminate cross-browser incompatibilities

- Extensible

- Use AJAX easily

AJAX

AJAX is a group of interrelated Web development techniques used on the client-side to create asynchronous Web applications.

It helps us:

- To have easier and quicker interaction between user and website
- As pages are not reloaded for content to be displayed
- To have easier navigation
- Reduce number of webpages

Celery

Celery is an asynchronous task queue/job queue based on distributed message passing.

It helps us:

- Process expensive background tasks on different workers (machines / clusters etc)
- Schedule tasks
- Make sure data is pre-processed to keep application fast and the user happy

Docker

Docker is a tool for containerising applications and the most integral part of our stack.

It helps us:

- Ensure all of our environments are the same
- Consistency in use of tools
- Use locally exactly what we deploy
- Avoid dependency hell

Django

Django is the web framework we are using.

It helps us:

- Do rapid prototyping

- Don't have to write boilerplate code

- Use vast array of python libraries (like oauth, requests etc)

- Use vast array of django libraries (like rest, celery etc)

Git

The best SCM tool on the planet :)

It helps us:

- Keep all of our work neatly organised
- Enables our use of industry-leading tools, processes (more on that later...)
- Be fast
- Break things!

Nginx

Nginx (pronounced Engine-X) is a
web server that is *fast*.

It helps us:

- Load balance requests
- Serve static files immediately
- Send requests to Django that need to be processed

  dynamically
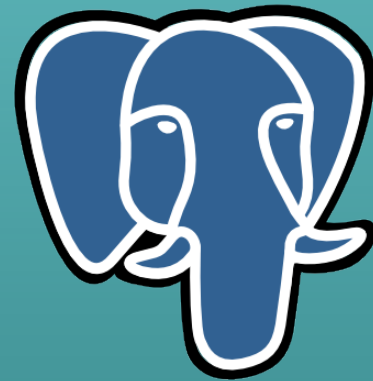
  (reverse-proxying)
- Keeps backend hidden

Postgres

PostgreSQL is a powerful, open source object-relational database system.

It helps us:

- Store data in a robust manner
- Easily integrate with django, no need for custom SQL queries
- Can store lots of data
- Fast

Redis

Redis is a data structure server. It is open-source, networked, in-memory, and stores keys with optional durability.

It helps us:

- As a backend to Celery
- Easily integrates with django
- Can store lots of data, with no particular structure required
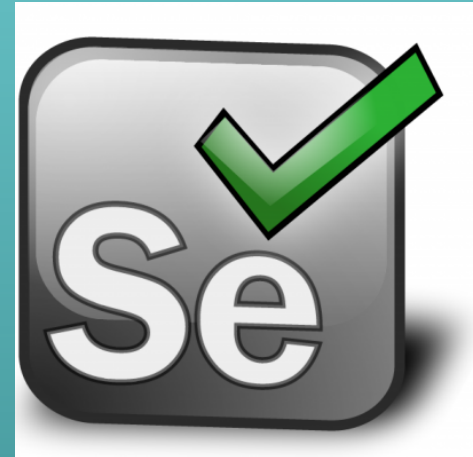- Fast / Can act as a cache

Selenium

Selenium is a browser driving tool, commonly used for automation.

It helps us:

- Automate user-acceptance test
- Ensure no functionality is broken by new feature
- Write once, run on every push

How we communicate

Trello	Agile, Sprints, Tasks etc
Slack	Chat, IM, Reports from CI/Trello etc
Hangouts	whole group meetings
Various docs	Decisons, Mockups, Flow Diagrams, etc

Development Tools

Pycharm	IDE
VIM	Editor
Eclipse	IDE
Circle CI /Travis	CI Builds/Deployment

Data Stack

What are the key data resources you are using and how are you accessing them?

Data Stack (some of the sources)

Data Accessed

- NewYorker
- mashable
- politico
- gizmodo
- microsoft
- marcoarment
- TheRegister
- androidcentral
- anandtech
- telegraphtech
- usatodaytech
- twitter
- google
- facebook
- arstechnica

- backchnnl
- geekwire
- FastCompany
- 9to5google
- motherboard
- WashPostTech
- cnbctech
- sengineland
- CNET
- engadget
- thenextweb
- windowsblog
- BIUK_Tech
- AndroidPolice
- macworld

- MacRumors
- ZDNet
- forbestech
- ReutersTech
- guardiantech
- venturebeat
- fwd
- bbctech
- WIRED
- business
- nytimesbits
- verge
- recode
- WSJD
- 9to5mac

Accessing the Data

- RSS (Rich Site Summary); often called Really Simple Syndication, uses a family of standard web feed formats to publish frequently updated information: blog entries, news headlines, audio, video.
- Web API's which are application programming interfaces (API) for either a web server or a web browser.

Twitter

- Twitter is also part of our data stack
- Mainly using twitter search
- Limited at "180 queries per 15 minute window" - but this is per access token
- We will get a different access token for every user that uses the twitter login button

SWOT Analysis of Business Opportunity

Analysis of the strengths, weaknesses, opportunities & threats surrounding the business opportunity you're pursuing

Strengths

- Focus on familiar topic
- Unique
- Awareness of customers needs
- Significant industry experience
- Low cost base
- Can respond to changes quickly

Opportunities

- Can identify influential customers to help build brand
- Many useful online resources for collaboration
- Availability of templates for web layouts
- Highly portable to an App
- High availability of news articles and Social media sources
- Large market place

Weaknesses

- No brand recognition
- Different working hours/commitments
- Don't have significant web layout experience
- No immediate plans for tablet/phone App
- We won't be creating any news article content ourselves

Threats

- Limited opportunities to contact potential customers directly
- Can send follow request to someone on twitter but not a friend request
- No barriers to entry
- Very difficult to get feedback
- Some of our potential influential customers may see us as competition
- Easy to make bad impression

Strengths

- Focus on technology means we are dealing topic we all know, use, follow and work in

- We are the type of typical customers that we would want

- We bring significant industry experience to the project

- Low cost base. everything we use is free.

- Can respond to changes quickly(e.g. add or remove content)

Weaknesses

- New brand so no brand recognition
- Need to coordinate around different working hours/commitments
- We don't have significant web layout experience
- No immediate plans for tablet/phone App
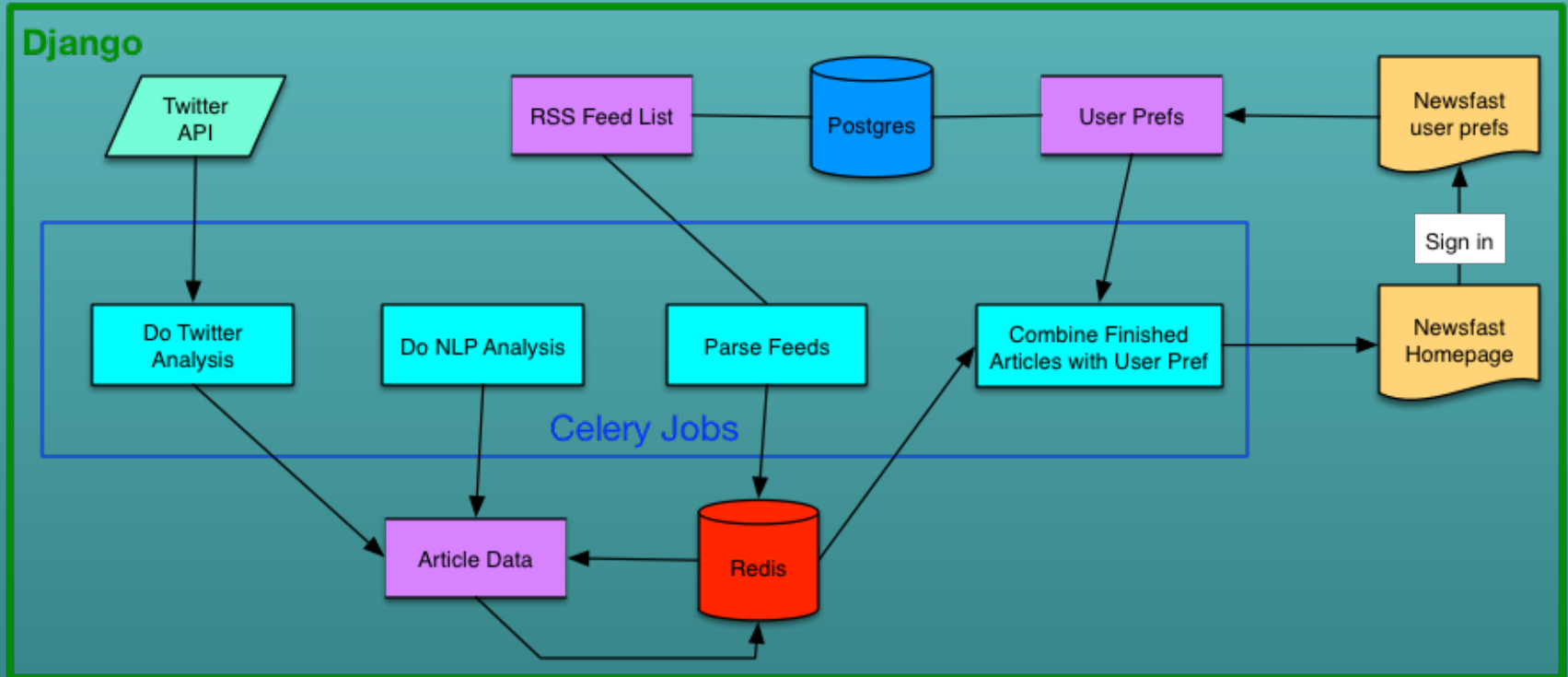- We won't be creating any news article content ourselves

Opportunities

- Can identify influential customers to help build brand and give feedback
- Many useful online resources for collaboration (slack, hangouts etc)
- High availability of templates for web layouts
- Highly portable to an App
- High availability of news articles and social media sources so we will always have timely content
- Large market place full of demanding customers who want information fast and from one source
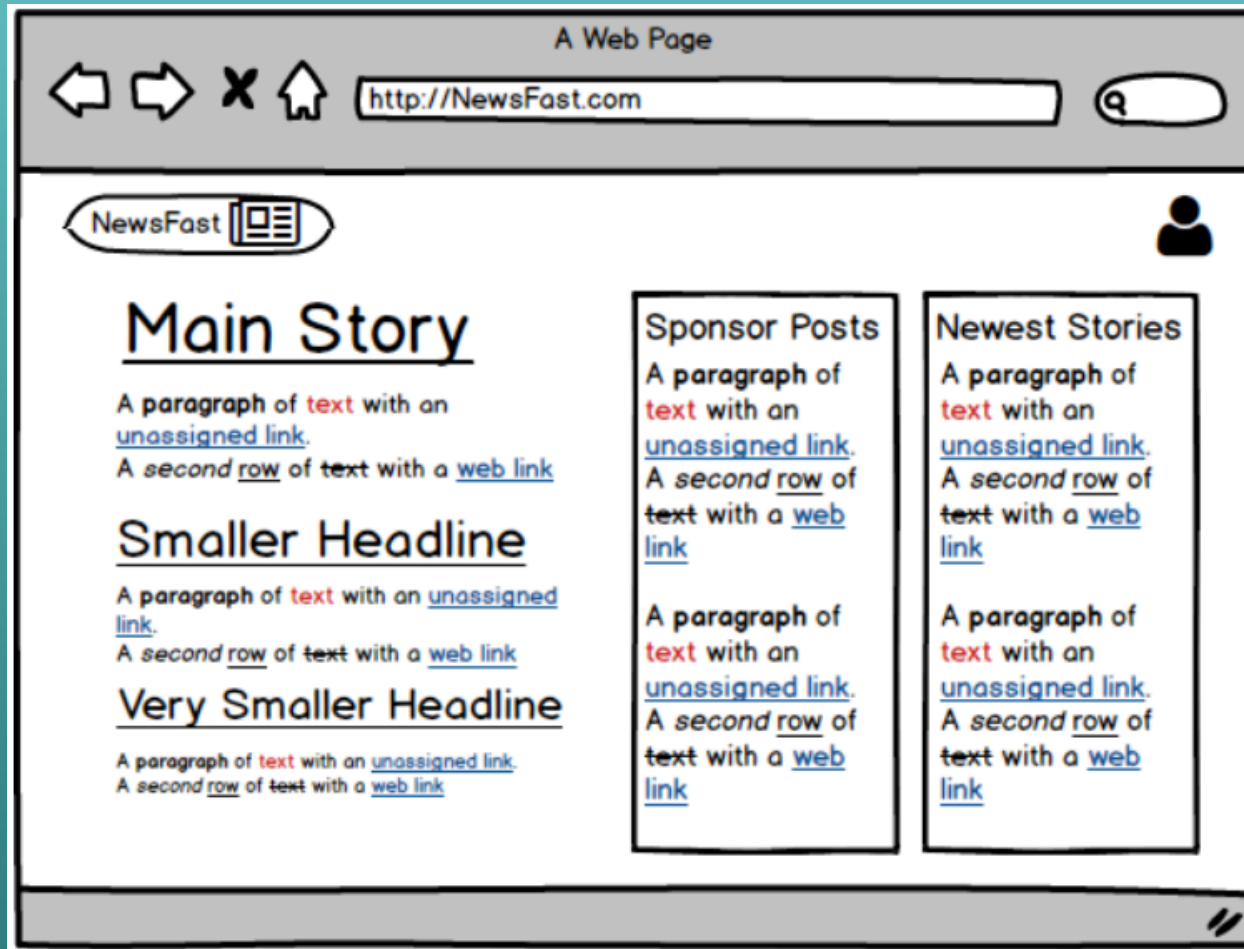
Threats

- Limited opportunities to contact potential customers directly
- Can send follow request to someone on twitter but not a friend request
- No barriers to entry. The technology & data sources we use are available to everyone else
- Very difficult to get feedback
- Some of our potential influential customers may see us as competition
- With demanding customers we get one chance at a first impression
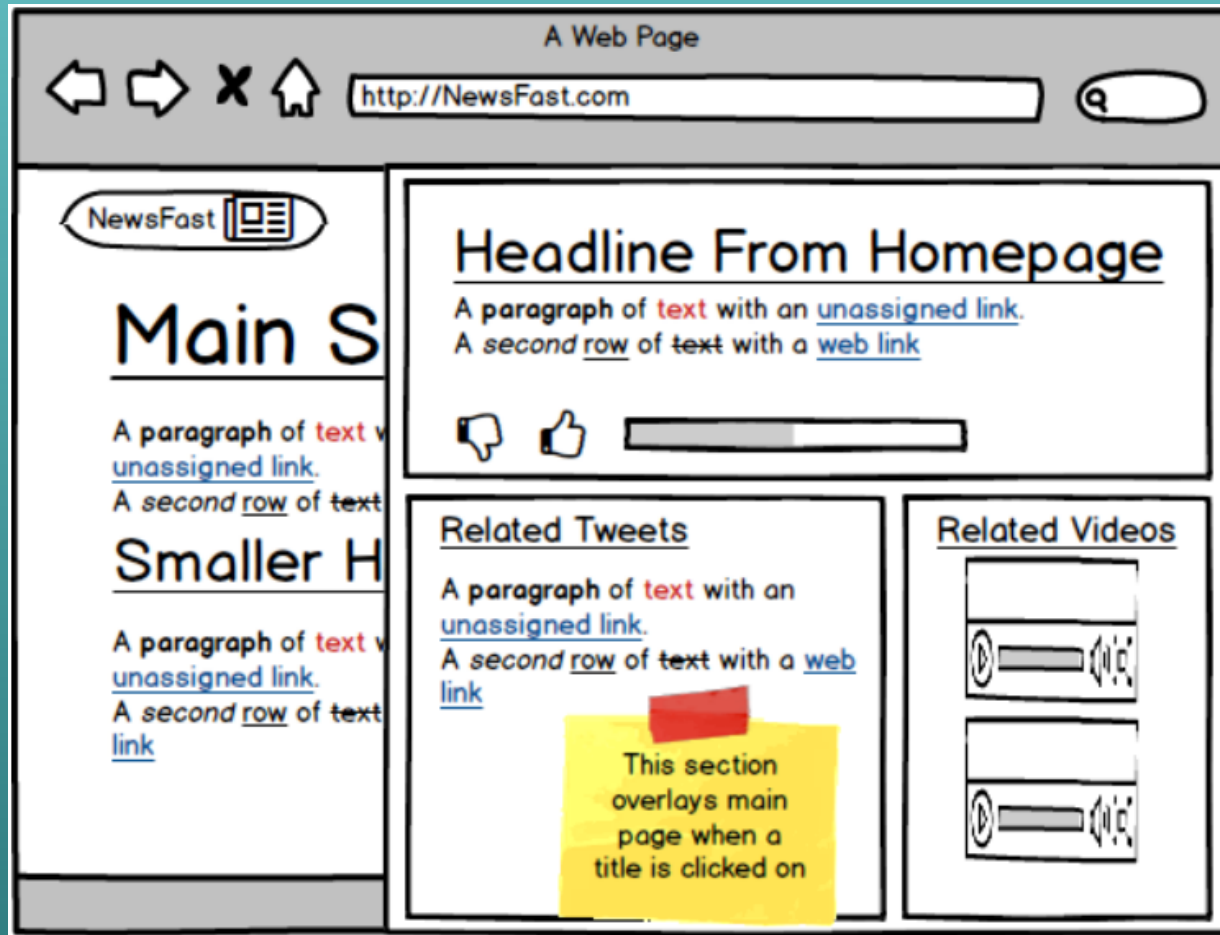
Current Prototype

Article Flow

MVP Mockup Homepage

http://NewsFast.com

NewsFast

Main Story

A **paragraph** of text with an unassigned link.
A *second* row of ~~text~~ with a web link

Smaller Headline

A **paragraph** of text with an unassigned link.
A *second* row of ~~text~~ with a web link

Very Smaller Headline

A **paragraph** of text with an unassigned link.
A *second* row of ~~text~~ with a web link

Sponsor Posts

A **paragraph** of text with an unassigned link.
A *second* row of ~~text~~ with a web link

A **paragraph** of text with an unassigned link.
A *second* row of ~~text~~ with a web link

Newest Stories

A **paragraph** of text with an unassigned link.
A *second* row of ~~text~~ with a web link

A **paragraph** of text with an unassigned link.
A *second* row of ~~text~~ with a web link

MVP Mockup article

VM screenshot

Prototype Demo

Product online at:

csi6220-1-vm2.ucd.ie

Learning

- From the current prototype we can learn
    - if users like the techology news
    - if users will sign in to twitter
- The first major point where we can learn is midway through the next sprint when we will have articles displayed with relevant tweets
- At that point we can learn from users if this enhancement of news is relevant and interesting to them
    - ■

Immediate next steps & project roadmap
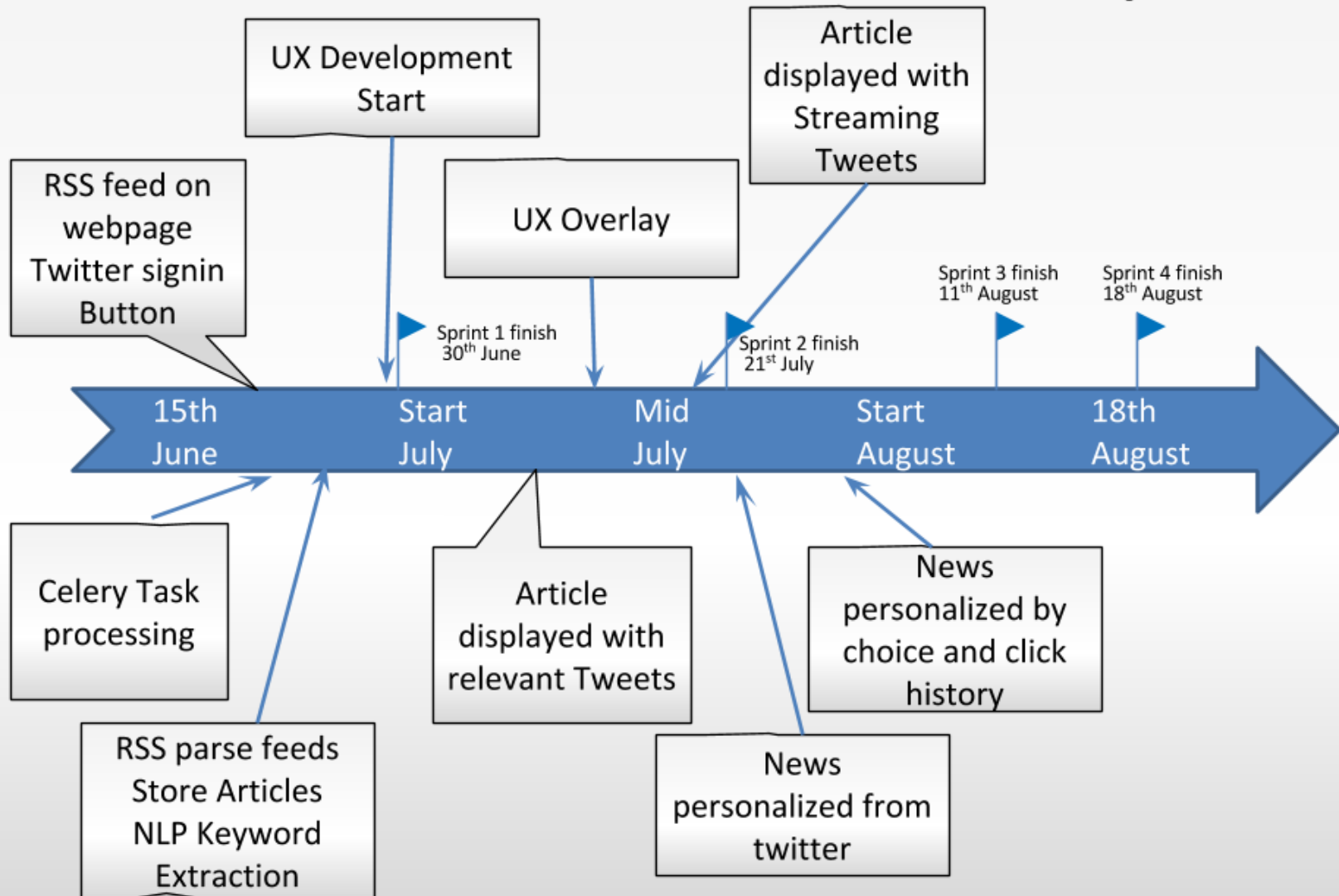
What are the immediate next steps?
Include reference to the biggest challenge currently facing the project
What is the overall roadmap for the rest of the project?

Immediate Steps

- Finalize web application branding
- Continue/Focus with UX development
- Get Article to display relevant tweets
- Get Article to display relevant streaming tweets
- Biggest Challenge is getting the relevant news to the user and making the UX an excellent one so that the user will return

Thanks for your time

We are happy to take any questions