**Background Research**

*Introduction*

Our system intends to allow a user to create a story collaboratively with other users via easily accessible means i.e. online through a website. The application must be free to use and support the browsing of other user’s stories by an intuitive interface.

**About the Users**

The users of this application will primarily be readers and writers across different genres i.e. fan fiction and other prose. The application will be usable by people of all ages.

**How the application will be used.**

The completed application will be available on mobile and desktop (through browser access on the web).The mobile versions of the application will also allow users to download stories to read offline.

**Benefits of the System**

* Free to read every story on the site without the need to register
* Easy way for upcoming writers to gain recognition and feedback on their work
* Stories are dynamic and can have thousands of different continuations and endings, allowing people to be more creative without limitations.

**The situation into which the system will be placed**

The are several websites which allow users to collaborate on stories. However, many of these websites deter potential users with their outdated user interfaces and lack of personalisation. Users may get bored with the lack of reward such websites provide and that other contributors can derail and ruin upcoming stories. This system therefore will address this issue as well as providing a modern, attractive and easy to use interface.

**Technology Research:**

**Technologies that solve similar problems:**

**Technologies that address the same problem as ours and their missing features that we will be implementing.**

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| --- | --- |
| **Technology** | **Features that are missing** |
| StoryTimed.com – Collaborative Story Writing | 1. Lack of categorisation 2. Limit to the number of contributors 3. Outdated UI 4. Static Stories 5. Only available on browser |
| Fanfiction.net – Story Sharing Website | 1. No Collaboration between writers 2. Static Stories 3. Outdated UI 4. Only available on browser |

**Technologies that solve different problems:**

|  |  |
| --- | --- |
| **Technology** | **Features we will implement** |
| Google Docs | 1. Exporting to multiple formats 2. Privacy 3. Multiple Fonts 4. Detailed history of who made changes. 5. Sharing outside of the site. 6. Mobile support |
| Quip | 1. Minimalist Design 2. Sharing outside of the site. 3. Commenting |

**Sources:**

Each source aims to inform a different area:

1. Creating an attractive system for a user to use
2. Issues with current systems
3. Research on user interests and evidence to support a new system

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| **Source** | **What Information** | **Judgement?** |
| **https://ebooks.webflow.com/ebook/web-design-101** | This website can allow us to learn about what is good web design and how we can implement it. | Good as the topic is well researched but might be subject to author bias. The website itself appears to be well build which adds a degree of reliability, although cannot be said to make their opinion any more relevant than other sources. |
| [**https://uk.trustpilot.com/review/fanfiction.net**](https://uk.trustpilot.com/review/fanfiction.net) | Users found that the design was awkward, with particularly intrusive advertisements. The administration also appears to be poor. | Seems to coincide with the same opinion reflected in other sources, and comes from a user with many reviews. However anyone can post a review so can only be taken with a grain of salt. |
| https://docs.google.com/forms/d/1h7wMyT8g-Zi25QLn-3XCqbth2lYdhy5y6E-G7t\_3uLE/viewanalytics | A majority of people prefer one-short chapter or a short novel – story length tends to have a negative impact on user retention for the average user. This would give extra evidence to suggest that there is a gap in the market. | Taken from a large sample size (400+) of users in varying demographics which would outweigh anyone filling out the survey with fake results. Can be considered a good source however caters to a slightly different niche (fan fiction). |

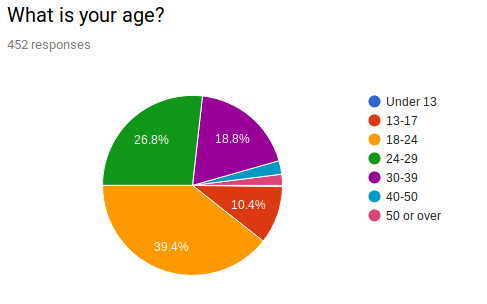
**Additional Literature**

A key feature continually mentioned relating to story writing and finding stories is the idea of categorization. The question to ask a developer is how we can categorize such a large sample of stories or extracts of stories automatically and dynamically so that keywords are relevant and interesting to a user. This would help to support higher user retention due to the user having stories more suitable to their interests.

Given this idea, we decided to research ways to algorithmically categorize stories based on the nature and source of words used. The research paper below discussed the Vector Space Model (VSM) and Bag of Words (BOWs) along with methodology used in their program (DocMine) to tackle this. This could give us some ideas when it comes to approaching such a task – although these are based on abstract mathematical concepts so further research may be required.

https://www.academia.edu/18324412/Categorization\_and\_Keyword\_Identification\_of\_Unlabeled\_Documents

**Additional Information regarding research:**

Demographic of Users using FanFiction.net according to a Reddit Community Census: (<https://www.reddit.com/r/FanFiction/comments/ajoyvj/rfanfiction_2019_community_census/>

**Aims:**

The aim of this project is to produce a collaborative story writing application. The idea is to enable readers and writers to experience a new literature style - stories will be written part by part, by different users adding one after another to a story line with a maximum character limit.

**Objectives:**

1. A user can sign up to the website and thereby login.
2. A user can create a story consisting of a limited amount of text.
3. A user can extend another user’s story.
4. A user can browse stories and access them with ease.

For our Objectives we will use the Goals, Questions, Indicators and Metrics (GQIM) Approach. We use this approach as it is often difficiult to measure complexity and resources in a project, and GQIM aims to serve a “practical approach for bounding the measurement problem”[[1]](#footnote-2). This means that each objective should also have subgoals, requirements and metrics.

1. Sugboals: A user can login through external means via Social Media handles, and user information is handled securely which would require knowledge of Spring Security. This can be measured through software testing. Quantified by “are credentials accessible if the datastore is compromised?”.
2. Additionally, the story can be “liked” by other users to show interest from user to another, which can be measured by a user receiving an increased number of likes when viewing their story.
3. Also, an extension to another user’s story is listed as a new “branch”. We measure that a unique new entry is created upon each user “branching”.
4. A subgoal could be that the stories they browse are tailored to be relevant to them which may require knowledge of Machine Learning. “Are the users seeing content that they are more likely to enjoy” is the question we ask.

1. . Research Paper on GQIM:

   <https://courses.cs.ut.ee/MTAT.03.243/2015_spring/uploads/Main/GQM_book.pdf>

   2. Explanation of GQIM:

   https://prezi.com/bnx7bcgg15kl/gqim-goals-questions-indicators-metrics/ [↑](#footnote-ref-2)