

# Writers' World

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## Analysis



### Background

As an aspiring filmmaker and screenwriter, I have had to learn how the industry works. Through my own research and networking, I have found that the current system of how screenwriters get placements is inconvenient for them and could be made more efficient. In addition, I have talked to my client about this subject before starting this project and he has also raised similar issues concerning this system.

### My Client

My client for this project is Rayan Ali, a Year 13 student in Dubai College. He is doing filmmaking for his undergraduate studies later this year; as a result, he has become knowledgeable about the world of screenwriting through preparing his portfolio for his university applications and by networking with those in the field.

### Initial Problem Statement

The current system of getting work as a screenwriter involves writing spec screenplays and sharing them with producers, people who can get them made into films by pitching them to the studios they work for. Efficient networking is vital to screenwriters as connecting with others in their field can get them more contacts to share their work with. However, this whole system can be inconvenient for screenwriters. Firstly, they can only share their work through directly e-mailing or messaging producers; with the number of screenplays producers are sent every day, it can be easy for screenwriters' work to be ignored. In addition, they can only network by either creating their own high-quality website - which can be for those with little experience - or by finding other writers on social media platforms such as Reddit, Instagram and Twitter; while those sites achieve their purpose, they are quite large which can lead to people with actual experience and knowledge being hard to reach.

### Intentions

Firstly, I need to look at the current system by analysing similar applications to my solution. Furthermore, I need to speak to Rayan Ali, my client, as he can give me valuable insight as to what features I could include. These forms of research will allow me to further develop my solution and get a better understanding of the problem that I am trying to solve. When doing my research, I need to consider how I can make my solution a better fit for screenwriters than what is currently being used and the different issues my solution could have.

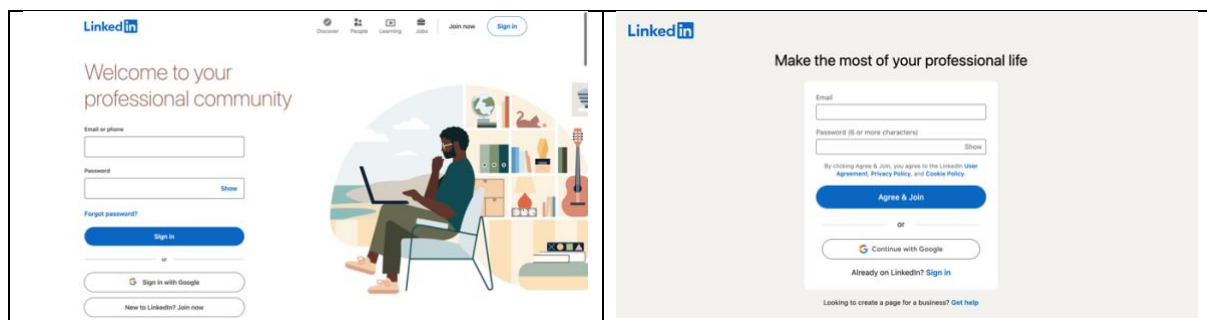
## Similar System Analysis

Through my analysis of the problem, I have found that my solution would work best as a website that functions as both a place to share content and connect with others in the field of screenwriting. It must allow users to sign up as screenwriters, create profiles to showcase their work and include features to make the process of finding work and contacts convenient. As a result, I have identified two websites that, to an extent, fulfil the requirements I have listed which I can analyse to gain ideas for features to implement in my solution.

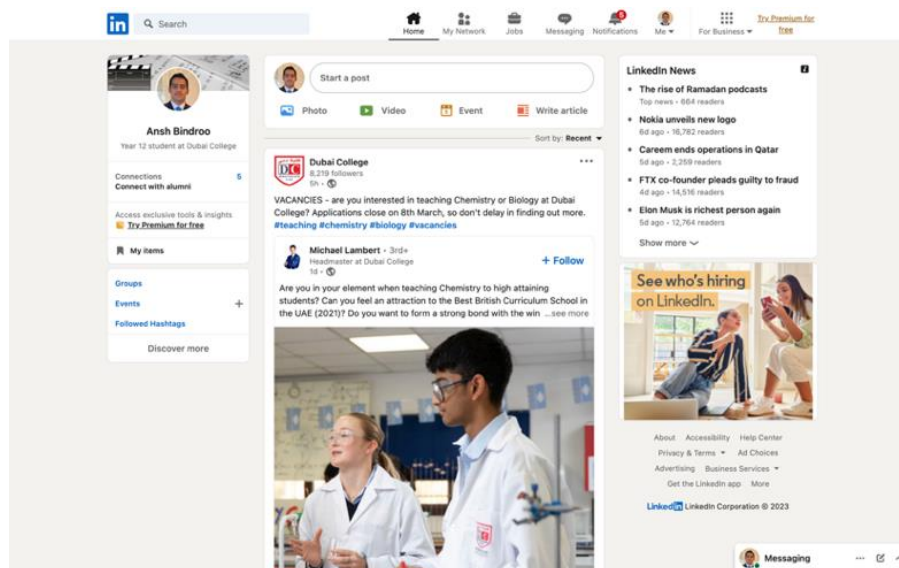
### LinkedIn



LinkedIn is a revered business-focused social media platform where users can look for jobs by creating profile pages that function as CVs, conduct professional networking through messaging other users and post content and achievements relating to their career. In addition, companies and employers can post jobs which users can apply for.

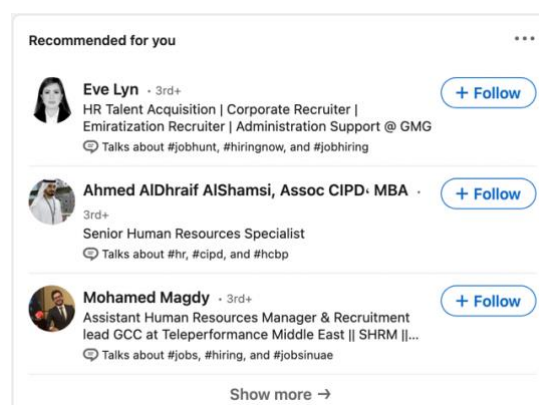


Firstly, as a social media platform, LinkedIn requires users to create an account to use it. On the page initially shown when you open the site (shown left), you can either sign in using your email address and password or join the platform by signing up using your email address and a password of 6 or more characters (shown right). Since my website will likely revolve around screenwriters creating their own profiles, this would be an extremely important feature to include; I would also have to create a database to store users' account information when they sign up and check against when users log in. In addition, requiring the password to be a minimum length would make users' accounts more secure so that would be vital to include too.

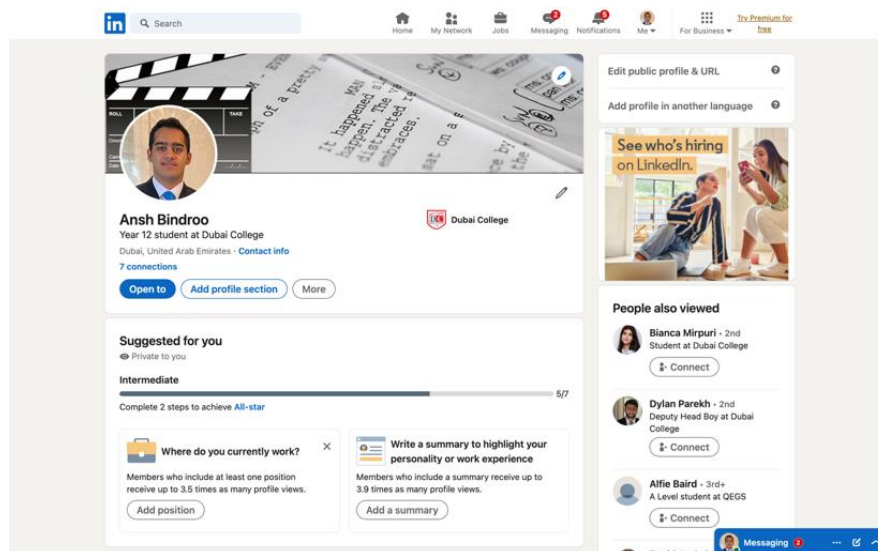


The home page the user is brought to when they sign into their LinkedIn account has a feed of posts from people the user has followed in the centre of the page and a navbar at the top of the page which can be used to go to the other section of the website; such features would be important to include in my website; while I have yet to find other sections that could be linked to in the navbar, the feed would be useful for showcasing users' screenplays.

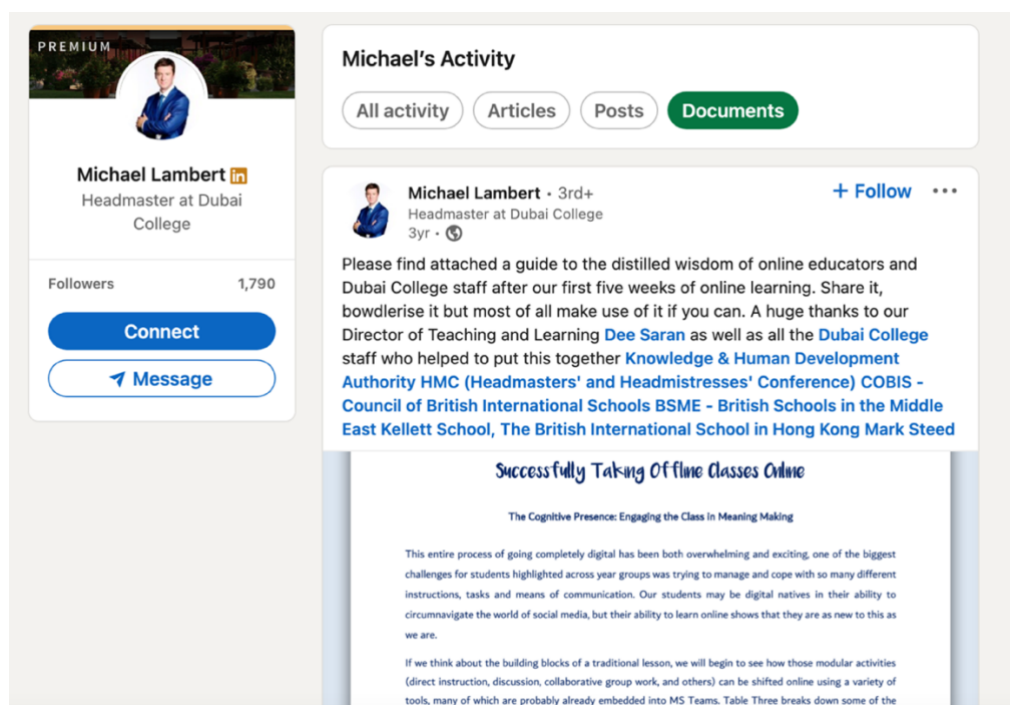
In addition, the home page has pleasingly minimalistic aesthetics that immediately give the site a sense of professionalism; this is an aspect of the website that I want to model because I need to make sure my website looks like a screenwriter-equivalent to LinkedIn instead of an inferior imitator. On the other hand, the homepage is slightly cluttered with text and elements; this is an aspect I will keep in mind when designing my home page layout as I want to make sure it is easy to navigate.



One interesting feature I noticed while browsing the feed was the "Recommended for you" element which suggests users worth networking with; including a feature like this in my solution could make it easier for users to find the right writers to talk to. However, I feel it could be too complex for this project since it may need AI to be implemented.




Another significant feature of LinkedIn that I would need to implement into my solution is user profile pages. LinkedIn gives its users the flexibility to add as many sections as they need and offers a variety of section types to allow users to showcase their skills, work experience and qualifications; while profiles in my solution will primarily focus on showcasing people's work, it would be useful to allow users to add essential information about them such as their contact information and links to their social media accounts. On the other hand, a major flaw with the profile page is that it does not allow for it to be changed aesthetically. While this is understandable considering the site's professional nature, I will aim to add such features to my application because my userbase would be made up of creatives who would want to further express themselves artistically through their pages' design. However, the changes users would be able to make should be minimal such as allowing the background colour to be changed or the font of the page's writing to be changed.



Finally, the Activity page shows users all the posts a user has put on their account and sorts them into categories of posts. One of the categories listed is 'Documents' as the site allows users to upload documents as posts to their profiles; I will need to create a similar feature for my site since my solution will revolve around users posting PDFs of their screenplays.

### Summary:

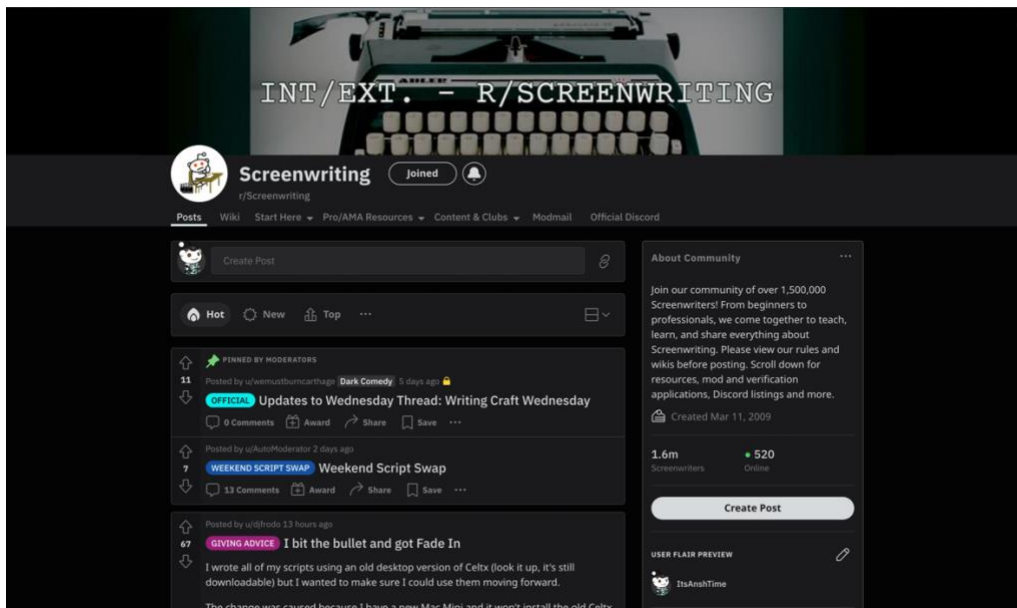
Positives	Negatives
<ul style="list-style-type: none"> <li>• The website has a sign-up/login system that allows users to create and log into accounts.</li> <li>• Posts can be viewed in the scrolling feed in the centre of the home page.</li> <li>• The home page has a navbar that allows users to access other areas of the website.</li> <li>• Users can create their own profile pages with a variable amount of content and different sections.</li> <li>• The whole site has minimalistic, sleek aesthetics.</li> <li>• The site allows you to post documents.</li> </ul>	<ul style="list-style-type: none"> <li>• The home page is slightly cluttered with elements and text.</li> <li>• The site does not allow for profile pages to be altered aesthetically.</li> </ul> 

### My proposed solution will need:

- A sign-up/login system
- A scrolling feed of posts in the home page
- A navbar in the home page
- A neatly structured home page
- A feature that allows users to create profile pages and posts
- A feature that allows users to post PDF documents as posts
- Minimalistic aesthetics

### [r/Screenwriting](#)

'r/Screenwriting' is a community of over 1,500,000 Screenwriters (or "subreddit") on the discussion website Reddit. According to the community's biography, the subreddit consists of screenwriters of varying levels of experience; it can be used to learn about the profession of screenwriting and share posts relating to it.



Firstly, there are certain fundamental features of Reddit that would be worth implementing into my application. For example, Reddit users can upvote or downvote posts and comment on them through comment sections that can be accessed when the post is clicked; I can adapt this to my site by allowing users to give their opinion on screenplays using like and dislike buttons or by commenting below them. In addition, every feed on Reddit has its own navbar that allows the feed to be sorted by Hot, New, and top of that day, month, year or all time. It would be useful to include a similar feature on my website's home page feed as it would give users more flexibility when searching for screenplay posts. However, rather than 'Hot', I would sort the feed by top of the day in descending order by default as it would be easier to implement.

### Industry Verification

#### Professional Verification

Professional Verification is intended for individuals who want to identify themselves with flairs such as WGA Writer, Produced Writer, Repped Writer, Director, Editor, or a personalized flair to be discussed with the mod team ([example](#)).

Please paste the following into this [link](#) and fill in your details.

- Name:
- IMDB:
- Link to Image Proof of photo ID (Drivers License, WGA Card etc) with address and ID number blanked out.

**photographed next to**

- A piece of paper with your Reddit username ([u/xxxxxxxxx](#)) written out on it.

We can assign you a flair so that people can recognize you more easily. Let us know if you want one and what you'd like it to be.

Eg.

WGA Screenwriter

Produced Screenwriter

Writer of [x]

One feature unique to r/Screenwriting is that users can get approval to identify themselves as industry professionals such as produced writers, directors, and WGA writers; by



becoming approved, they gain a flair next to their username. I could adapt this idea in my application to allow producers to join the website and be verified by having them enter their company. This would make it much easier for screenwriters' work to reach accomplished people from the industry who can get them placements. In addition, I find the home page for this subreddit easier to navigate than LinkedIn's so I think it would be a better model to take inspiration from when designing my homepage.

In addition, users can put out different types of posts on this subreddit; other than screenplays, users can put out discussion posts, requests for advice and announcements about competitions. While I do not want to borrow heavily from this subreddit in terms of the types of posts users can create in order to avoid complete imitation, I could allow producer accounts to post screenwriting competitions or challenges which would give writer accounts opportunities to prove their skills to professionals. Furthermore, whenever users' posts are responded to, a notification is sent to a notifications store which they can access from the navbar; it would be necessary to include this feature to notify screenwriter users of producers' responses to their competition submissions.

In terms of issues, however, it can be inconvenient to post your scripts to gain feedback because, unlike LinkedIn, it does not offer PDF documents to be uploaded so users have to settle with providing shareable links to their script; this would not be ideal for my site as giving out links could allow users to easily download screenplays from posts. Therefore, my website should allow users to only upload their screenplays as PDFs for posts or responses to screenwriting competitions; users should also not be able to download screenplays to prevent them from being shared with people without accounts. Furthermore, Reddit users' profile pictures are not included with posts; this gives posts on the subreddit a sense of anonymity so I would make sure posts on my website would include users' profile picture next to their usernames in a similar fashion to LinkedIn.

### Summary:

Positives	Negatives
<ul style="list-style-type: none"> <li>• Users can get approval to be identified as industry professionals.</li> <li>• The posts feed can be sorted by different preferences.</li> <li>• Users are able to give their opinion on posts through voting or commenting.</li> <li>• Users are able to put out different types of posts.</li> <li>• The homepage is easy to navigate.</li> </ul>	<ul style="list-style-type: none"> <li>• Documents cannot be uploaded as posts.</li> <li>• Users' profile pictures are not included with posts.</li> </ul>

### My proposed solution will need:

- Like/dislike buttons on posts
- Comment sections included with posts
- To allow users to be approved as industry professionals

- To allow producer users to post competitions or challenges
- A home page that is easy to navigate
- To allow documents to be uploaded as posts
- Users' profile pictures included with posts



## Client Interview

To further develop my current ideas for my application, I conducted an interview with my client, Rayan Ali, to hear his feedback and suggestions for the project that would make it better suited to my userbase of screenwriters.

*Before asking any questions, I gave Rayan a brief of the project including the background, my initial problem statement and my current intentions for what I wanted to create, updated with my findings from the similar systems analysis.*

### **1. Is there anything else I need to consider in terms of the problem I am trying to solve with my application?**

“Well, you also must consider that screenwriters who are more secure due to having contracts with studios would probably not use an application like this. I would say to make sure this website is an open platform for aspiring screenwriters looking to make a start in the industry. Make it clear that the screenwriter and producer account types are separate as the producer userbase should consist of industry professionals only.”

**Analysis of response:** He seemed firm on the fact that I should aim to make this application geared towards screenwriters who are starting out rather than those who are already established. I could consider this while creating specific account flairs which can be used to differentiate users by level of experience. Also, rather than allowing users to select their own flair, I could make them automatically applied to accounts depending on factors like the number of posts they have and the average rating their screenplays get. Another way I could make the account types separate is by preventing producer users from commenting on screenplays; it would ensure that writers and producer accounts conduct business in discretion rather than in a public forum like a comment section, making the site more professional for those in the industry.

### **2. From what I have told you, do you think there are any limitations to this project?**

“A few that came to mind immediately when you were briefing me. For one, how are you going to verify producers who sign up? You’ll need some sort of account approval system similar to how Twitter verifies users to make sure all producer accounts are legitimate industry professionals. There is also obviously the issue of plagiarism arising from people possibly stealing each other’s scripts or ideas. You could have a feature that automatically adds a watermark or cuts down the length of the documents as a preventative measure.

**Analysis of response:** While I figured to implement a producer account approval system from analysing r/Screenwriting, it would make sense to create a two-factor authentication system like that of Twitter to validate producer guild email addresses. In addition, his suggestions for preventative measures to combat plagiarism were features I had in mind; however, I may need to prototype those features to see if they can be implemented into a web application. In addition, I could also allow users to share a set number of pages from anywhere in their screenplay so they could share specific scenes and get feedback on them.

**3. Do you have any suggestions for page creation features that would make this website a better alternative for screenwriters than sites like LinkedIn?**

"I would say to make sure users can add a section for their contact details and a biography to give general information about themselves. Also, users should be able to include the title and logline for the screenplay they post as well as an additional message for context. In addition to the comment section and like/dislike system you mentioned, you could allow users to annotate screenplays that other people have posted."

**Analysis of response:** While allowing both screenwriter and producer users to add their contact details, a biography and loglines are obvious features, the concept of allowing posted screenplays to be annotated is interesting; however, I feel that such a feature would be too complex to implement into this website and could give users too much freedom as to how they can edit others' posts.

**5. What are your thoughts on this site allowing users to aesthetically customise pages? Do you have any suggestions for other customisation features?**

"I think the idea of users being able to change the appearance of their pages is great as it would give your application an edge over LinkedIn in terms of customisation. It is important to restrict what can be customised so that the site is still professional so allowing background colour and font style should be enough. Allowing users to upload their own profile pictures would also be good."

**Analysis of response:** Allowing both screenwriter and producer users to upload their own profile pictures would be necessary; I am not sure how to control the types of profile pictures that are uploaded so I would just have to make it clear on the website that the photos should be professional and of the user only. In addition, I now have a favourable second opinion on the idea of adding page customisation features.

**6. Do you have any suggestions as to what other features producers accounts could have?**

"Add a Request button to posts that would allow producer users to notify screenwriters that they want permission to view their full scripts. Screenwriter users would then be able to grant or deny access to those who requested. It would make the process more convenient than having to message them."

**Analysis of response:** His suggestion of a Request button is a good one as it would make the process easier, and it should not be too difficult to implement into my application. I could also allow producer users to attach a short message with their request so they can introduce themselves to the screenwriter user.

**7. What are some other features I could add in general?**

"Personally, I think it would be great if the website could recommend scripts to you based on your preferences. You could also have an option to sort screenplays by genre by having

users put flairs, like Reddit, on their scripts and you could have a rating system of stars instead of a like and dislike button in the comments section.”

**Analysis of response:** While the idea of screenplays being recommended to users may be too complex for this project, the other two suggestions are viable. I could allow users to add genre flairs to their screenplay posts and then include a dropdown tab in the navbar with the sorting preferences that filters posts to only include screenplays of a selected genre. I could even allow producer accounts to add genre tags for genre-themed competition posts. In addition, a rating system of 1 to 5 stars would be a better way for users to share their opinion on posted screenplays.

In conclusion, from this client interview, the web application should:

1. Allow users to be identified by their level of experience
2. Use a two-factor authentication system to verify producer accounts when they are being created
3. Automatically watermark and reduce the length of screenplays that are uploaded for posts
4. Allow users to add a biography, profile picture and contact information to their page
5. Include a ‘Request’ button on posts for producer users only that allows them to request permission to access full screenplays
6. Allow producer users to send a short message with their requests
7. Allow users to accept and decline requests from producers
8. Allow users to add genre tags to screenplay posts
9. Allow users to filter their feed by genre
10. Allow users to rate others’ screenplays on a scale of 1 to 5 stars

### Prototype: PDF Manipulation

To test my client’s idea of watermarking and editing the lengths of uploaded screenplays to prevent plagiarism, I created a web application using Flask which allows the user to upload their screenplay as a PDF and extract the pages they want uploaded as a post; they can upload up to 10 pages of their screenplay. The application then automatically watermarks the file, cuts it down to the selected pages and displays the screenplay on a separate page.

```
app.py
from flask import Flask, render_template, request, redirect, url_for, flash
from flask_wtf import FlaskForm
from wtforms import FileField, SubmitField, IntegerField
from werkzeug.utils import secure_filename
import os
from wtforms.validators import InputRequired
import PyPDF4
from PyPDF4 import PdfFileReader, PdfFileWriter
import shutil
import PyPDF2
from PyPDF2 import PdfReader, PdfWriter

app = Flask(__name__)
app.config["SECRET_KEY"] = "supersecretkey"
```

```

app.config["UPLOAD_FOLDER"] =
"/Users/anshbindroo/Desktop/CSFilmNEA/Prototype"

class UploadFileForm(
    FlaskForm
):
    # Allows users to input the data needed to upload their screenplay.
    file = FileField("File", validators=[InputRequired()])
    start = IntegerField("Start page: ", validators=[InputRequired()])
    end = IntegerField("End page: ", validators=[InputRequired()])
    submit = SubmitField("Upload File")

def AreThereSpaces(
    filename,
):
    # Checks if the name of the file they have uploaded has any spaces
    spaces = 0
    chars = list(filename)
    for i in range(0, len(chars)):
        if chars[i] == " ":
            spaces += 1
    if spaces > 0:
        flash("Your filename CANNOT have spaces!")
        for i in range(0, len(chars)):
            if chars[i] == " ":
                chars[i] = "_"
        newname = "".join(chars)
        os.remove(newname)
        spaces = 0
        return True
    else:
        return False

def IsPDF(filename): # Checks if the uploaded file is a PDF (the correct
format)
    extension = (filename).split(".")
    ext = extension[1]
    if ext != "pdf":
        flash("Your file is not a PDF!")
        os.remove(filename)

def ValidPageNums(
    filename, start, end
):
    # Checks if the program can output the correct pages (no page numbers
going over the length of the screenplay and only 10 pages can be
uploaded)
    file2 = PyPDF2.PdfReader(filename)
    nums = len(file2.pages)
    if end > nums:
        flash("Your screenplay doesn't have "+str(end)+"pages!")
        os.remove(filename)
        return False
    elif end - start > 10:
        flash("You can't upload more than 10 pages!")
        os.remove(filename)

```

```

        return False

def watermark(input_pdf, output_pdf, watermark): # Watermarks the pages
    watermark = PyPDF4.PdfFileReader(watermark)
    page_watermark = watermark.getPage(0)
    input_pdf_reader = PyPDF4.PdfFileReader(input_pdf)
    output_pdf_writer = PyPDF4.PdfFileWriter()
    for page in range(input_pdf_reader.getNumPages()):
        page = input_pdf_reader.getPage(page)
        page.mergePage(page_watermark)
        output_pdf_writer.addPage(page)
    with open(output_pdf, "wb") as output:
        output_pdf_writer.write(output)

def split_pdf(
    input, output, start, end
): # Cuts the screenplay down to the pages selected by the user
    reader = PyPDF2.PdfReader(input)
    writer = PyPDF2.PdfWriter()
    for page_num in range(start, end): # loop through pages
        selected_page = reader.pages[page_num]
        writer.add_page(selected_page) # add/embedding of the page
    with open(output, "wb") as out:
        writer.write(out)

@app.route("/", methods=["GET", "POST"])
@app.route("/home", methods=["GET", "POST"])
def home():
    form = UploadFileForm()
    if form.validate_on_submit():
        # The data is grabbed from the form
        file = form.file.data
        start = form.start.data
        end = form.end.data
        # The file is saved to the folder
        file.save(
            os.path.join(
                os.path.abspath(os.path.dirname(__file__)),
                app.config["UPLOAD_FOLDER"],
                secure_filename(file.filename),
            )
        )
        if AreThereSpaces(file.filename) == True:
            return render_template(
                "index.html", form=form
            ) # Any time the data the user has inputted is invalid, the
            user is sent back to the home page
        else:
            if IsPDF(file.filename) == False:
                return render_template("index.html", form=form)
            else:
                if ValidPageNums(file.filename, start, end) == False:
                    return render_template("index.html", form=form)
                else:

```

```

PyPDF4.PdfFileReader(file.filename)
watermark(
    input_pdf=file.filename,
    output_pdf="watermarked.pdf",
    watermark="watermark.pdf",
)
os.remove(file.filename)
split_pdf(
    input="watermarked.pdf",
    output="finalfile.pdf",
    start=start,
    end=end,
)
os.remove("watermarked.pdf")
shutil.move("finalfile.pdf", "static/files")
return render_template("uploaded.html")

return render_template("index.html", form=form)

@app.route("/post") # Directly takes the user to the post page
def post():
    return render_template("post.html")

if __name__ == "__main__":
    app.run(debug=True)

```

index.html

### Upload your screenplay

The file must be a PDF.

2. The file name cannot have any spaces.

No file chosen

Start page:

Note: Coverpage = 0

End page:

Disclaimer: Your file won't be uploaded if you upload more than 10 pages of your screenplay.

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Home</title>
</head>
<body>
    <div style="text-align:center" class="container">
        <h1>Upload your screenplay</h1>
        <h3>The file must be a PDF.</h3>
        <h3>2. The file name cannot have any spaces.</h3>

        <form method='POST' enctype='multipart/form-data'>

```



```

        {{form.hidden_tag()}}
        {{form.file()}}
        <br>
        <br/>
        <h2>Start page:</h2>
        <h3>Note: Coverpage = 0</h3>
        {{form.start()}}
        <h2>End page:</h2>
        {{form.end()}}
        <h3>Disclaimer: Your file won't be uploaded if you upload
more than 10 pages of your screenplay.</h3>
        <br>
        <br/>
        {{form.submit()}}
    </form> <!--The Jinja code below allows the warning messages to
be displayed when the user inputs invalid data.-->
    {% with messages = get_flashed_messages() %}
        {% if messages %}
            {% for message in messages %}
                <h3>{{ message }}</h3>
            {% endfor %}
        {% endif %}
    {% endwith %}
</div>

</body>
</html>

```

uploaded.html

**File uploaded and manipulated**

[View Post](#)

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>File uploaded</title>

```



document together. Therefore, I could create a function that allows the user to create their own watermark PDF with customised text.

## Final Problem Statement

People who aspire to work as screenwriters can get jobs with studios by writing spec screenplays and sharing them with producers from the industry who can pitch them and get them made into movies. However, networking and sharing screenplays can be inconvenient for screenwriters as it can be difficult for them to reach producers and industry professionals and get their work seen by them. In addition, there is a lack of a universal platform for networking, resulting on screenwriters having to rely on social media platforms such as Reddit, Instagram and Twitter that lack professionalism.

## Proposed Solution

My solution is to create a web application that would simplify the process of finding work as a screenwriter by functioning as a universal platform for those in the business; screenwriters would be able to use it to share their screenplays while producers could use it to find talent through looking at screenplay posts and posting their own competitions or challenges.

## Scope

### **In-Scope Features**

- Separate accounts for screenwriters and producers
  - It is vital that the accounts for screenwriters and producers are distinct considering the completely different features the accounts have.
- Page creation for screenwriter accounts
  - This is the first of my project's complexities as I aim to implement this feature using object-oriented programming.
- Post creation – uploading screenplays
  - This feature is important in the context of the program as it is the basis of how screenwriters will be able to share their work on the website.
- PDF manipulation – editing screenplay documents to prevent plagiarism
  - This is another complexity of my project and it acts a solution to one of my project's biggest limitations; I have also been able to prototype it so it can surely be implemented.
- Rating and commenting on posts
  - Adding this is vital as it will act as the only way screenwriters can receive feedback on their work through the website itself.
- 'Request' system for producer accounts
  - This system is needed as it will be the only way screenwriter and producer accounts will be able to contact each other on the site itself.
- Producer account posts – competitions and challenges

- I feel this is necessary enough as it would be a unique way for screenwriter and producer accounts to interact and would provide a different avenue for writers to showcase their skills to industry professionals.

### **Out-Of-Scope Features**

- Private messaging
  - While implementing such a feature makes sense, I am not sure if I will have time to add it. It is also not completely necessary as screenwriters would likely use other applications such as e-mail or WhatsApp for long-term contact with producers.
- User/screenplay recommendations based on user's activity
  - Implementing this would require the use of AI, making it too complex to create compared to the other more significant features of the website.
- User annotation of posted screenplays
  - This feature would be complex to implement and I don't have a compulsion to create it since users can already give feedback through the comment section.

## Final Project Objectives

### Sign-up/login system:

1. If the user does not have an account, they should be able to sign up using their name, email address and password. *(Page 3 – LinkedIn Analysis)*
2. Passwords used for users' accounts should be 8 characters or more to be valid for use. *(Page 3 – LinkedIn Analysis)*
3. When the user signs up, their name, email address and password should be stored in the user database. *(Page 3 – LinkedIn Analysis)*
4. The user should be able to choose to create a screenwriter account or a producer account. *(Page 7 – r/Screenwriting Analysis)*
5. If the user does have an account, they should be able to log in using their registered email address and password. *(Page 3 – LinkedIn Analysis)*
6. When the user logs in, the email address and password they enter should be checked against the user database. *(Page 3 – LinkedIn Analysis)*
7. The user should not be able to access the website without logging into a registered account. *(Page 3 – LinkedIn Analysis)*

### Home page:

1. The home page should have a scrolling feed of posts in the centre. *(Page 4 – LinkedIn Analysis)*
2. The home page feed should be sorted by top of the day in descending order by default. *(Page 7 – r/Screenwriting Analysis)*
3. The user should be able to sort their feed by recent, top of this week and top of this month using a dropdown tab. *(Page 7 – r/Screenwriting Analysis)*
4. The home page should have a dropdown tab of genres next to the feed that allows the feed to show screenplays from a specific genre. *(Page 10 – Client Interview)*
5. The home page should have a navbar that has tabs to allow the user to access the home page, their profile page, the producer competitions feed, producer requests and notifications. *(Page 4 – LinkedIn Analysis)*

### Screenwriter account type:

1. Screenwriter users should be assigned a level of experience that appears as a flair next to their username based on the number of screenplays they have posted and the average rating their posts get. *(Page 9 – Client Interview)*
2. Screenwriter users should be able to create their own profile page. *(Page 5 – LinkedIn Analysis)*
3. Screenwriter users should be able to upload their own profile picture to their profile page. *(Page 11 – Client Interview)*
4. Screenwriter users should be able to add a biography section to their profile page. *(Page 11 – Client Interview)*
5. Screenwriter users should be able to add their contact information to their profile page. *(Page 11 – Client Interview)*
6. Screenwriter users should be able to change the background colour of their profile page. *(Page 5 – LinkedIn Analysis)*
7. Screenwriter users should be able to change the font of the text on their profile page. *(Page 5 – LinkedIn Analysis)*

8. Screenwriter users should be able to post screenplays to their profile. *(Page 6 – LinkedIn Analysis)*
9. Screenwriter users should be able to upload their screenplay as a PDF to be posted. *(Page 8 – r/Screenwriting Analysis)*
10. The website should only allow PDF documents to be uploaded for screenwriter users' posts. *(Page 8 – r/Screenwriting Analysis)*
11. The website should allow screenwriter users to choose up to 10 pages of their screenplay to upload as a post. *(Page 10 – Client Interview)*
12. Screenwriter users should not be able to upload more than 10 pages of their screenplay as a post. *(Page 10 – Client Interview)*
13. The website should automatically add a watermark of the screenwriter user's name to each page of an uploaded screenplay. *(Page 10 – Client Interview)*
14. Screenwriter users should be able to add titles, loglines and an additional message to screenplays they are posting to their profile. *(Page 10 – Client Interview)*
15. Screenwriter users should be able to add genre tags to screenplay posts. *(Page 11 – Client Interview)*
16. Screenwriter users' profile pictures should be included next to their username in the post. *(Page 8 – r/Screenwriting Analysis)*
17. Screenwriter users should be able to accept or decline requests from producer users to view their full screenplays. *(Page 11 – Client Interview)*

Producer account type:

1. Producer users should be able to be approved as industry professionals using two-factor authentication if their email is from a producing company. *(Page 8 – r/Screenwriting Analysis)*
2. Producer users should be able to create their own profile. *(Page 8 – r/Screenwriting Analysis)*
3. Producer users should be able to upload a profile picture of their choice to their profile. *(Page 11 – Client Interview)*
4. Producer users should be able to add a biography section to their profile. *(Page 11 – Client Interview)*
5. Producer users should be able to add their contact information to their profile. *(Page 11 – Client Interview)*
6. Producer users should be able to create posts for screenwriting competitions or challenges that appear in the Competitions feed. *(Page 8 – r/Screenwriting Analysis)*
7. Producer users should be able to add genre tags to their competition posts. *(Page 12 – Client Interview)*
8. Producer user should be able give written responses to screenwriter competition submissions that are sent back to users via the notification system. *(Page 8 – r/Screenwriting Analysis)*
9. Producer users should not be able to comment on screenplay posts from screenwriter users. *(Page 10 – Client Interview)*

Screenplay post interaction:

1. Screenwriter and producer users should be able to comment on screenplays using a comment section attached to posted screenplays. *(Page 7 – r/Screenwriting Analysis)*
2. Screenwriter users should be able to rate screenplays using a star system of 1 to 5 stars. *(Page 12 – Client Interview)*
3. All screenplay posts should have a Request button that allows producer users to request screenwriter users for permission to view their full screenplays. *(Page 11 – Client Interview)*
4. When the Request button is pressed, producer users should be able to type a short message to be sent with their request. *(Page 11 – Client Interview)*
5. Users should not be able to download other people's screenplays from their posts. *(Page 8 – r/Screenwriting Analysis)*

Competitions feed:

1. The feed of competition posts should be sorted by number of submissions in descending order by default. *(Page 7 – r/Screenwriting Analysis)*
2. Screenwriter users should be able to sort the feed by recent, top of this week and top of this month using a dropdown tab. *(Page 7 – r/Screenwriting Analysis)*
3. Screenwriter users should be able to upload a screenplay as a submission to a producer user's post. *(Page 7 – r/Screenwriting Analysis)*



## Modelling

### Login System

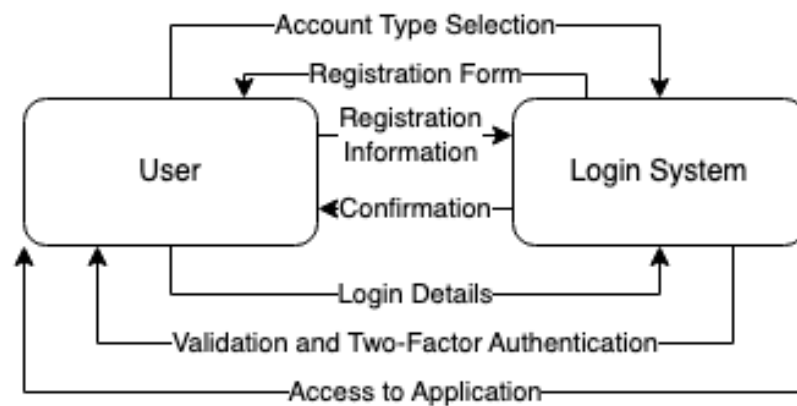
#### Data required:

- Account type - the user must create an account if they don't have one. Before they input their details, they must select whether to create a screenwriter account or a producer account.

Once the user has selected their account type, they must input account details including:

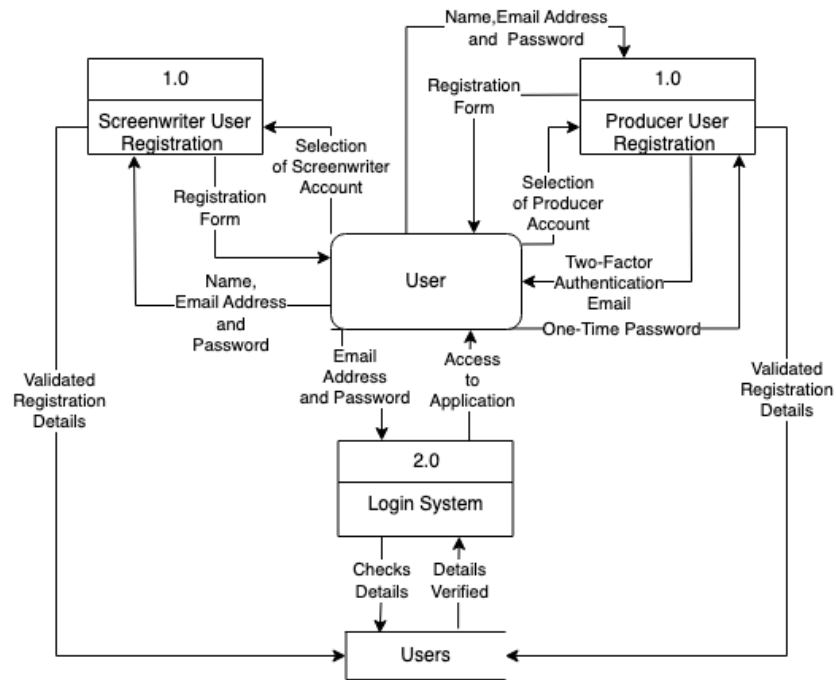
- Their name
- Their email address
- Their password (8 characters or more)

If the user is creating a producer account, their email address must have a domain name of a producer's guild which will be checked using two-factor authentication. Once inputted and validated, their details are then stored as a user record in a database. The record is checked for when the user subsequently logs into the application.

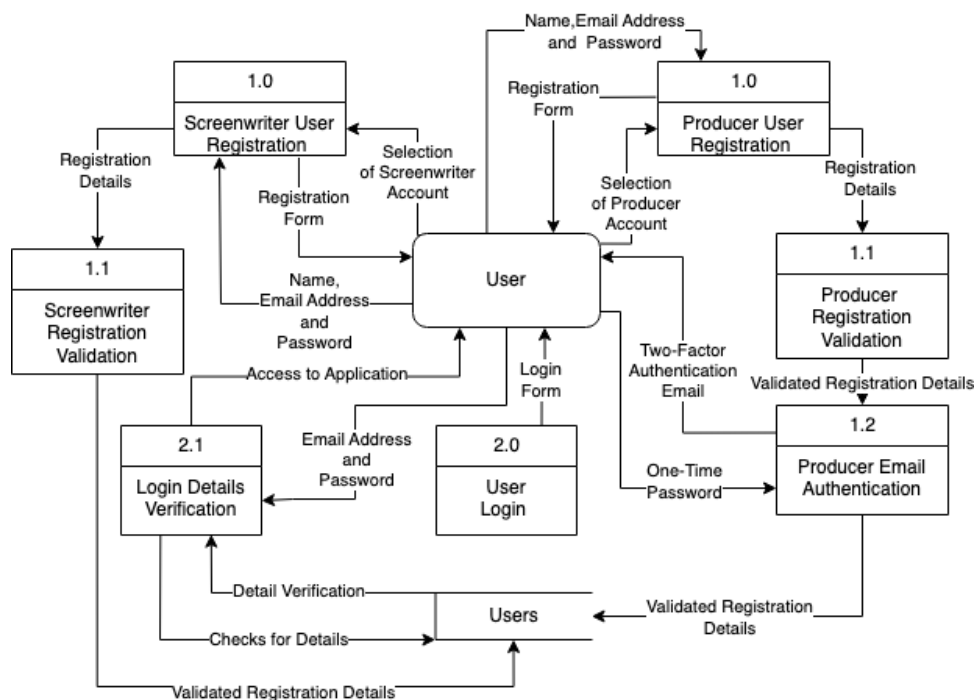


Data Flow Diagram Level 0





Data Flow Diagram Level 1



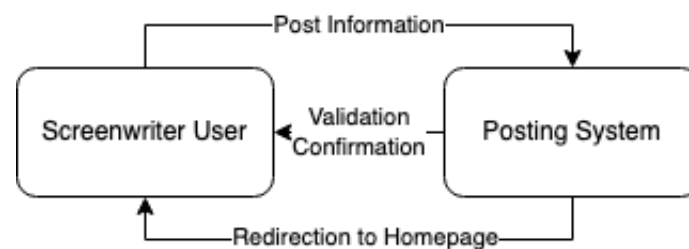
Data Flow Diagram Level 2

Main Post Feed

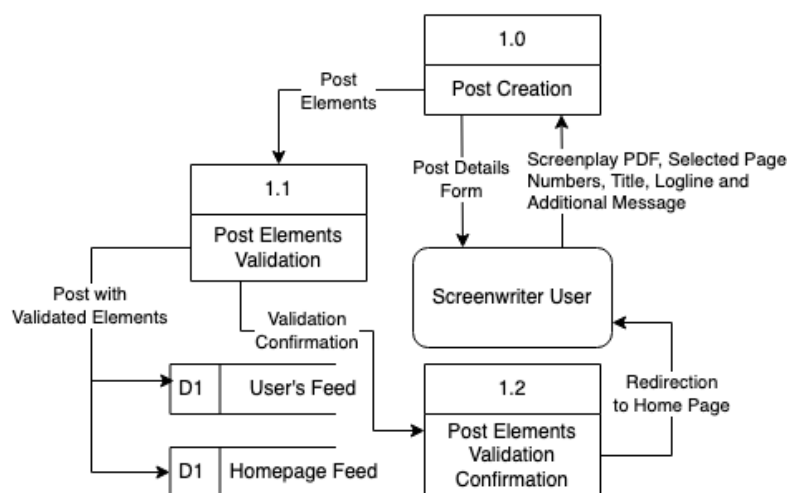
Data required:

- PDF of user's screenplay
- Page numbers – the user has to select the range of pages which will be uploaded

- Title of screenplay
- Logline – a very short paragraph that details the plot of the screenplay
- Additional message



Data Flow Diagram Level 0

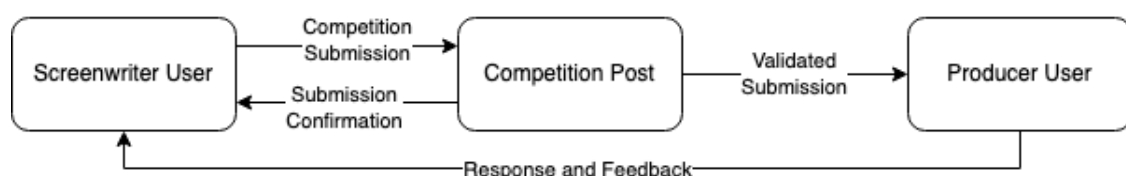


Data Flow Diagram Level 1

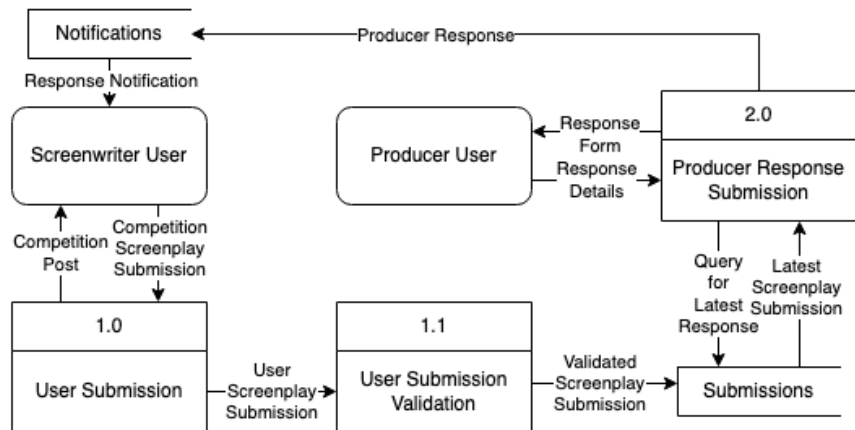
## Competitions Feed

### Data required:

- A competition post consisting of the competition's brief
- Users' submissions in the form of PDF documents



Data Flow Diagram Level 0



Data Flow Diagram Level 1