

CSE471: System Analysis and Design Project Report

Project Title: Storytelling Website

Group: 03 Section: 04 **Summer 2024**

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Introduction

The SOYO (Story of Your Own) storytelling project is a functional website built using MERN Stack framework. The goal of this project is to allow users to take part in a story community either being a reader or an uprising writer. The users here can write their own stories or search for stories written by other users and build a community.

The project involves several features like:

- User authentication and profiles,
- A vast library of user-generated stories with advanced search and filtering options,
- A rich text editor with styling tools for enhancing narrative structure,
- A robust content management system for authors,
- And an overall emphasis on providing an engaging, user-friendly platform for storytelling

The rapid evolution of digital platforms has redefined the way readers and writers connect with literature. The SOYO Writing Platform is a comprehensive initiative designed to bring readers and writers together in a seamless online environment, offering an extensive range of stories, and creative works that cater to diverse tastes and genres.

SOYO envisions an intuitive online platform where users can effortlessly explore, discover, and engage with content that resonates with their interests. By focusing on a user-centric interface and interactive features, SOYO replicates the intimate experience of traditional reading while embracing the flexibility and convenience of digital access. The platform aims to foster an engaging environment where readers can easily search for their preferred genres, authors, and topics, while writers can publish, share, and grow their audience.

This project encapsulates the principles of successful online platforms, blending user experience optimization, content management, and community-building tools. Through innovation, accessibility, and personalization, SOYO seeks to transform the way modern readers consume and interact with written content, enabling a dynamic, digital literary community.

Functional Requirements

Module 1:

User management (author/readers):

- -login/signup/authentication
- -profile picture upload/change/delete
- -Followers/following
- -Works(published/drafts)
- -Add to list(add stories in your list) (read/reading/want to read)

Module 2:

Writing:

- -Modify story/save
- -Add tags
- -Default title and summary font : Standardize the appearance of titles and summaries.
- -Comment section under each chapter: Enable comments on each chapter with features to reply, like, delete, report, copy, and block users.
- -Translations

Module 3:

Content Discovery and Organization:

- Genre: use tags to organize works into genre
- Search Functionality
- Sorting stories
- Top reads: Display top read stories of the day in front page
- Bookmarking: Users can bookmark stories to receive update on new chapters
- Display uprising authors

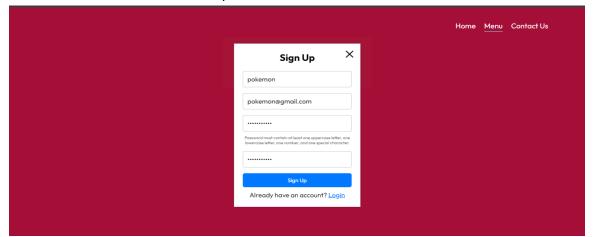
Module 4:

Story discussion forum:

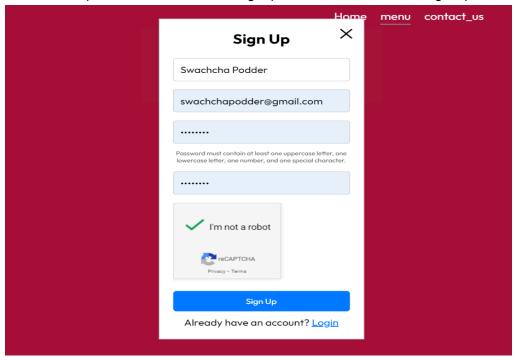
- Create/delete post
- Reply to post
- Like, delete, copy post/replies
- Idea Polling: Create polls within posts to gather opinions on story directions or character development.
- Resource Sharing: Allow users to share writing resources using QR code within the forum.
- Real time chat

User Manual

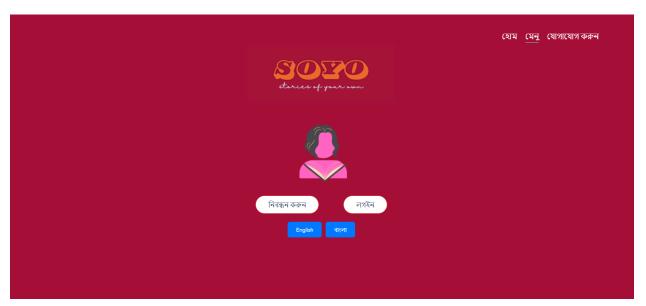
This is the **sign up page** where the user creates a new account. Username, email and password is required. The password must be 8 characters long with uppercase letters, lowercase letters, numbers and special characters.



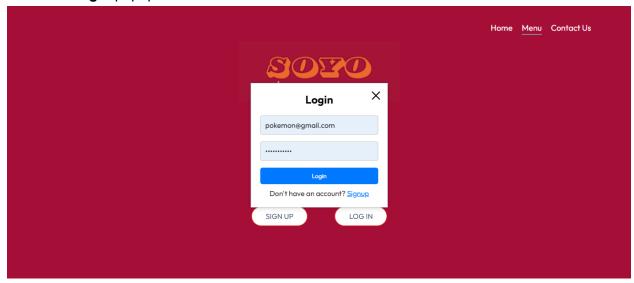
This is the **Authentication page** where it is detected if the user is already signed in or not. It also resets the Captcha after a successful signup or once clicked on the Sign Up button.



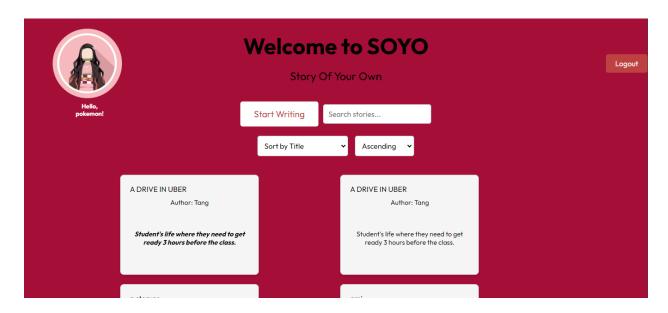
Options to switch languages, the user can translate the feature instructions to either of these languages



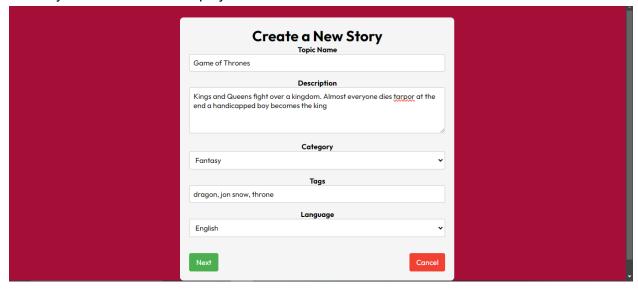
This is the login popup



This is the homepage



After clicking the start writing button, the user is redirected to the writing page where they fill up the story information to be displayed.

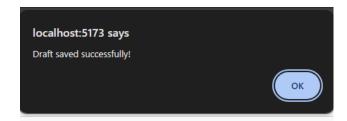


After clicking the next button, the user is redirected to a chapter writing page. Here they can also **style the title and description** according to their choice.

	Write Your Chapter	r
	B I <u>U</u> ∑x	
Game of Thrones		
	Description	
	B I <u>U</u> I _x	
Kings and Queens fig handicapped boy bed	ght over a kingdom. Almost everyone dies tarpor ecomes the king	at the end a
	Chapter Content	
Save as Draft	Publish	Cancel

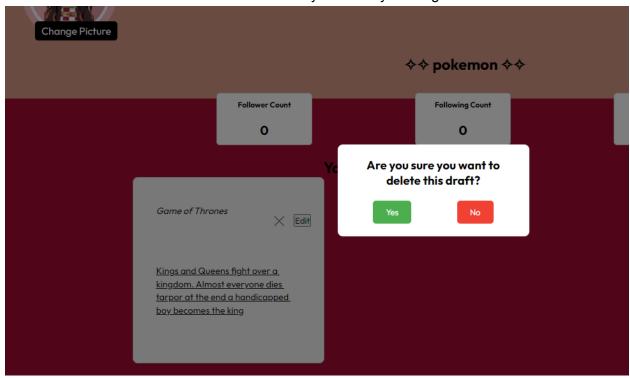
Write Your Chapter Title B I U Ix Game of Thrones Description B I U Ix Kings and Queens fight over a kingdom. Almost everyone dies target at the end a handicapped boy becomes the king Chapter Content The morning had dawned clear and cold, with a crispness that hinted at the end of summer. They set forth at daybreak to see a man beheaded, twenty in all, and Bran rode among them, nervous with excitement. This was the first time he had been deemed old enough		
Description B I ∪ T _x Kings and Queens fight over a kingdom. Almost everyone dies targar at the end a handicapped boy becomes the king Chapter Content The morning had dawned clear and cold, with a crispness that hinted at the end of summer. They set forth at daybreak to see a man beheaded, twenty in all, and Bran rode among them, nervous with excitement. This was the first time he had been deemed old enough	Write Your Chapter	
Description B I U Ix Kings and Queens fight over a kingdom. Almost everyone dies targar at the end a handicapped boy becomes the king Chapter Content The morning had dawned clear and cold, with a crispness that hinted at the end of summer. They set forth at daybreak to see a man beheaded, twenty in all, and Bran rode among them, nervous with excitement. This was the first time he had been deemed old enough	B I <u>U</u> ℤ _x	
B I U Ix Kings and Queens fight over a kingdom. Almost everyone dies torper at the end a handicapped bay becomes the king Chapter Content The morning had dawned clear and cold, with a crispness that hinted at the end of summer. They set forth at daybreak to see a man beheaded, twenty in all, and Bran rode among them, nervous with excitement. This was the first time he had been deemed old enough	Game of Thrones	
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The morning had dawned clear and cold, with a crispness that hinted at the end of summer. They set forth at daybreak to see a man beheaded, twenty in all, and Bran rode among them, nervous with excitement. This was the first time he had been deemed old enough		
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	hinted at the end of summer. They set forth at daybreak to see a man beheaded, twenty in all, and Bran rode among them, nervous with excitement. This was the first time he had been deemed old enough	•
Save as Draft Publish Cancel	Save as Draft Publish Co	ncel

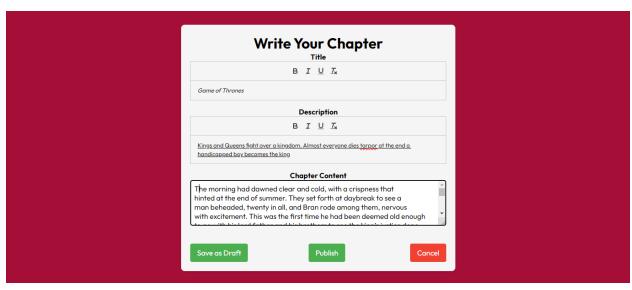
After writing a chapter, the user can click the **save as draft button** and then their stories will be saved in their profile as drafts.



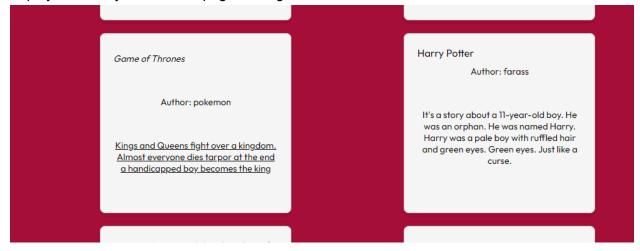


The user can choose to **delete their draft** if they wish to by clicking the cross button.





However, they can also choose to **edit their draft** and click the publish button. Doing so will display their story in the homepage among all the stories



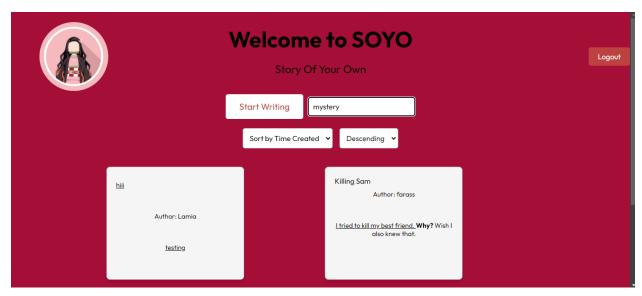
The readers can also **sort the published stories** according to date and title in both ascending and descending order.



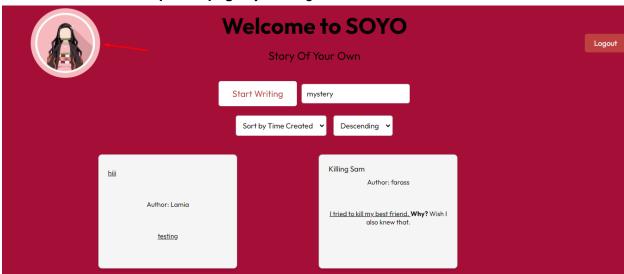


The users can **search the stories** they want to read according to their titles, author names, or categories.

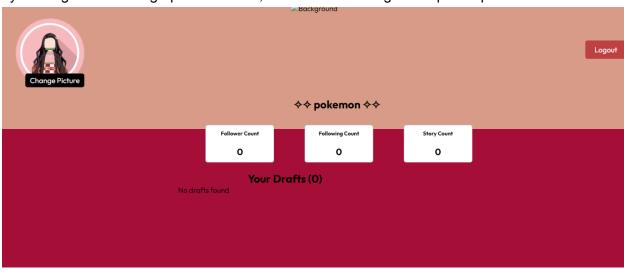


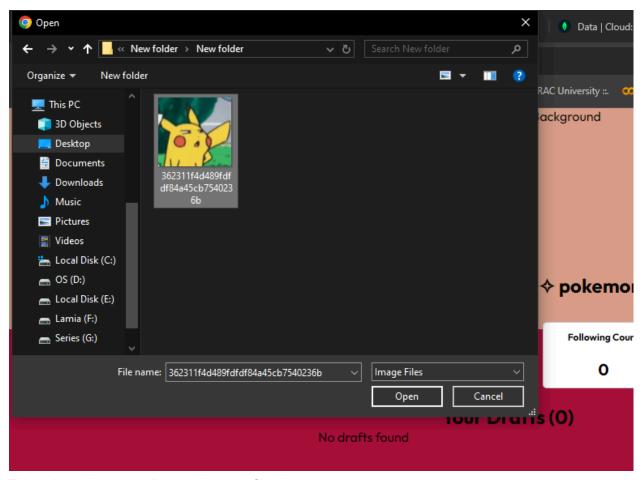


The users can visit their profile page by clicking on the icon shown below

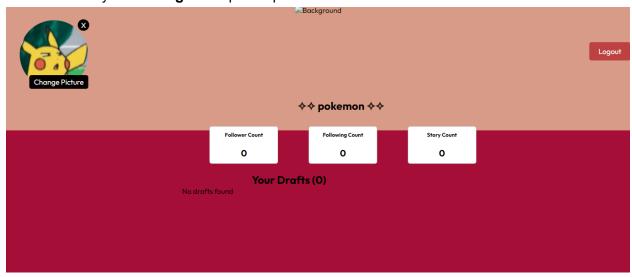


By clicking on the change picture button, the user can change their profile picture.

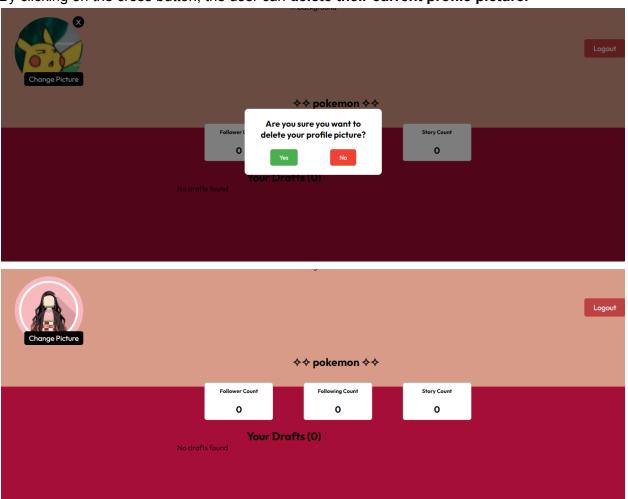




This is how they can **change** their profile picture



By clicking on the cross button, the user can delete their current profile picture.



Frontend Development

Login/signup/authentication

```
frontend > src > components > Login > 🏶 Login.jsx > 🕪 Login > 🕪 handleLoginClick
      const Login = ({ onClose, onSignupClick, setIsLoggedIn,setName }) => {
        const history = useHistory();
        const [email, setEmail] = useState('');
        const [password, setPassword] = useState('');
        const [error, setError] = useState('');
        const [success, setSuccess] = useState('');
        const handleLoginClick = async (e) => {
          e.preventDefault();
          try {
             const response = await axios.post('/api/user/login', { email, password });
             console.log('Received response:', response.data);
             if (response.status === 200) {
               localStorage.setItem('token', response.data.token);
              localStorage.setItem('userId', response.data.userId);
              localStorage.setItem('userName', response.data.userName);
              setSuccess('Login successful!');
              setError('');
              setIsLoggedIn(true);
               setName(response.data.userName);
              history.push('/home');
             } else {
114
               setError(response.data.error || 'Login failed. Please try again.');
```

```
history.push('/home');
    setError(response.data.error || 'Login failed. Please try again.');
    setSuccess('');
  // Handle any other errors (e.g., network or server errors)
setError('Login failed. Please try again.');
  setSuccess('');
console.error('Login error:', error);
<div className="login-form">
  <button className="close-button" onClick={onClose}>X</button>
  <h2>Login</h2>
  <form onSubmit={handleLoginClick}>
   <div className="form-group
     <input type="email" placeholder="Email:" value={email} onChange={(e) => setEmail(e.target.value)} />
    <div className="form-group">
     <input type="password" placeholder="Password:" value={password} onChange={(e) => setPassword(e.target.value)} />
    {error && <div className="error-message">{error}</div>}
    {success && <div className="success-message">{success}</div>}
    <button type="submit">Login</button>
  <span onClick={onSignupClick} style={{ color: '#007bff', textDecoration: 'underline', cursor: 'pointer' }} > Signup </span>
```

```
({ onclose, onsignupciick, setisLoggedin,setName }) => {
 const handleLoginClick = async (e) => {
    console.error('Login error:', error);
  <div className="login-form">
    <button className="close-button" onClick={onClose}>X</button>
    <h2>Login</h2>
    <form onSubmit={handleLoginClick}>
      <div className="form-group
        <input type="email" placeholder="Email:" value={email} onChange={(e) => setEmail(e.target.value)} />
      <div className="form-group">
       <input type="password" placeholder="Password: " value={password} onChange={(e) => setPassword(e.target.value)} />
      {error && <div className="error-message">{error}</div>}
      {success && <div className="success-message">{success}</div>}
      <button type="submit">Login</button>
    <span onClick={onSignupClick} style={{ color: '#907bff', textDecoration: 'underline', cursor: 'pointer' }} > Signup </span>
export default Login;
```

```
import React, { useState } from 'react';
import './SignUpForm.css';
import axios from 'axios'
const SignUpForm = ({ onClose, onLoginClick, setUser }) => {
 const [name, setName] = useState('');
 const [email, setEmail] = useState('');
 const [password, setPassword] = useState('');
 const [confirmPassword, setConfirmPassword] = useState('');
 const [error, setError] = useState('');
 const [success, setSuccess] = useState('');
 const handleSignUpClick = async (e) => {
   e.preventDefault();
   if (password !== confirmPassword) {
     setError('Passwords do not match');
     return;
     const response = await axios.post('/api/user/signup', { name, email, password });
     console.log('Received response:',response.data);
     if (response.status === 201) {
       localStorage.setItem('token', response.data.token);
       setSuccess('Sign up successful!');
       onClose();
      } else {
       setError(response.data.error);
```

Profile picture upload/change/delete

```
const Profile = ({ setIsLoggedIn }) => {
 const [imageFile, setImageFile] = useState(null);
 const [imageFileUrl, setImageFileUrl] = useState(localStorage.getItem('profileImageUrl') || assets.defaultpfp2);
 const [name, setName] = useState(localStorage.getItem('userName') || '');
 const [drafts, setDrafts] = useState([]);
 const [draftCount, setDraftCount] = useState(0);
 const [showDeleteModal, setShowDeleteModal] = useState(false);
 const [draftToDelete, setDraftToDelete] = useState(null);
 const [showProfilePictureDeleteModal, setShowProfilePictureDeleteModal] = useState(false);
 const history = useHistory();
 const userId = localStorage.getItem('userId');
 useEffect(() => {
   if (!localStorage.getItem('profileImageUrl') || !localStorage.getItem('userName')) {
     const fetchUserData = async () => {
         const response = await axios.get('/api/user/profile', {
           headers: { Authorization: `Bearer ${localStorage.getItem('token')}` }
         const profilePictureUrl = response.data.profilePicture || assets.defaultpfp2;
         const fetchedName = response.data.name || '';
```

```
const handleProfilePictureChange = (e) => {
  const file = e.target.files[0];
 if (file) {
    setImageFile(file);
    const previewUrl = URL.createObjectURL(file);
    setImageFileUrl(previewUrl);
const handleProfilePictureDeleteClick = () => {
  setShowProfilePictureDeleteModal(true);
const confirmResetProfilePicture = async () => {
 try {
    const response = await fetch('/api/user/delete-profile-picture', {
     method: 'DELETE',
      headers: {
        'Content-Type': 'application/json',
        Authorization: `Bearer ${localStorage.getItem('token')}`
      body: JSON.stringify({ userId }),
```

```
useEffect(() => {
  if (imageFile) {
    uploadImage();
}, [imageFile]);
const uploadImage = async () => {
 const formData = new FormData();
  formData.append('file', imageFile);
  formData.append('userId', userId);
    const response = await axios.post('http://localhost:5000/upload', formData, {
     headers: { 'Content-Type': 'multipart/form-data' }
    if (response.data.success) {
     const uploadedImageUrl = `http://localhost:5000/public/Images/${response.data.result.image}`;
      setImageFileUrl(uploadedImageUrl);
      localStorage.setItem('profileImageUrl', uploadedImageUrl);
  } catch (error) {
    console.error('Error uploading image:', error);
```

Published/Drafted stories

```
const Writing = () => {
      const [topicName, setTopicName] = useState('');
      const [description, setDescription] = useState('');
      const [category, setCategory] = useState('');
      const [tags, setTags] = useState('');
      const [language, setLanguage] = useState('');
      const history = useHistory();
      const handleNext = (e,status) => {
         e.preventDefault();
16
         const storyData = {
          topicName,
18
          description,
          category,
20
          tags,
          language,
          status
         history.push('/chapters', { storyData });
```

```
const handleDeleteDraftClick = (id) => {
  setDraftToDelete(id);
  setShowDeleteModal(true);
};
const confirmDeleteDraft = async () => {
  try {
    await axios.delete(`/api/stories/${draftToDelete}`, {
      headers: { Authorization: `Bearer ${localStorage.getItem('token')}
    });
   setDrafts(drafts.filter(draft => draft. id !== draftToDelete));
    setDraftCount(draftCount - 1);
    setShowDeleteModal(false);
  } catch (error) {
    console.error('Error deleting draft:', error);
};
const cancelDeleteDraft = () => {
  setDraftToDelete(null);
 setShowDeleteModal(false);
};
const handleEditDraft = (draft) => {
  history.push({
   pathname: '/chapters',
   state: { storyData: draft }
  });
};
```

Add tags

```
<div className="form-group">
  <label htmlFor="description">Description</label>
    id="description"
    value={description}
    onChange={(e) => setDescription(e.target.value)}
    required
<div className="form-group">
  <label htmlFor="category">Category</label>
    id="category"
    value={category}
    onChange={(e) => setCategory(e.target.value)}
    required
    <option value="" disabled>Select Category</option>
    <option value="Action">Action</option>
    <option value="Adventure">Adventure
    <option value="Fanfiction">Fanfiction</option>
    <option value="Fantasy">Fantasy</option>
<option value="Horror">Horror</option>
    <option value="Humor">Humor</option>
<option value="Mystery">Mystery</option>
<option value="Poetry">Poetry</option>
<option value="Romance">Romance</option>
    <option value="Science fiction">Science fiction</option>
<div className="form-group">
 <label htmlFor="tags">Tags</label>
    type="text"
```

```
<label htmlFor="tags">Tags</label>
      type="text"
     id="tags"
value={tags}
     onChange={(e) => setTags(e.target.value)}
     required
 <div className="form-group">
   <label htmlFor="language">Language</label>
     id="language"
     value={language}
     onChange={(e) => setLanguage(e.target.value)}
     required
     <option value="" disabled>Select Language
     <option value="English">English</option>
     <option value="Bangla">Bangla</option>
 <div className="button-group">
   <button type="submit" className="submit-btn">
      Next
   <button type="button" className="cancel-btn" onClick={() => history.push('/')}>
      Cancel
</form>
```

Modify/save stories

```
const confirmDeleteDraft = async () => {
    await axios.delete(`/api/stories/${draftToDelete}`, {
     headers: { Authorization: `Bearer ${localStorage.getItem('token')}` }
    setDrafts(drafts.filter(draft => draft._id !== draftToDelete));
    setDraftCount(draftCount - 1);
    setShowDeleteModal(false);
  } catch (error) {
    console.error('Error deleting draft:', error);
const cancelDeleteDraft = () => {
  setDraftToDelete(null);
  setShowDeleteModal(false);
const handleEditDraft = (draft) => {
 history.push({
    pathname: '/chapters',
    state: { storyData: draft }
  <div className="profile-container">
```

Changeable title/description styles

```
const Chapters = () => {
  const location = useLocation();
  const history = useHistory();
  const { storyData } = location.state || {};

  const [chapters, setChapters] = useState(storyData?.chapters || '');
  const [styledTitle, setStyledTitle] = useState(storyData?.topicName || '');
  const [styledDescription, setStyledDescription] = useState(storyData?.description || '');

// Toolbar options for title and description
  const titleModules = { toolbar: [['bold', 'italic', 'underline', 'clean']] };
  const descriptionModules = { toolbar: [['bold', 'italic', 'underline', 'clean']] };
```

```
return (
  <div className="chapter-writing-container">
    <h1>Write Your Chapter</h1>
   <form className="chapter-writing-form">
      <div className="form-group">
        <label htmlFor="styledTitle">Title</label>
        <ReactQuill
          id="styledTitle"
          theme="snow"
         value={styledTitle}
         onChange={setStyledTitle}
         modules={titleModules}
      </div>
      <div className="form-group">
        <label htmlFor="styledDescription">Description</label>
        <ReactOuill
          id="styledDescription"
          theme="snow"
          value={styledDescription}
          onChange={setStyledDescription}
         modules={descriptionModules}
```

Search functionality

```
const handleSearch = (e) => {
    setSearchQuery(e.target.value);
};
```

```
</div>
</div>
<div className="welcome-section">

<h1>Welcome to SOYO</h1>
Story Of Your Own
<div className="button-container">
<button className="btn" onclick={handleWritingClick}>Start Writing</button>
<input
    type="text"
    placeholder="Search stories..."
    className="search-input"
    value={searchQuery}
    onchange={handleSearch}
    />
    </div>
```

```
const filteredStories = stories.filter((story) => {
  const lowerQuery = searchQuery.toLowerCase();
  return (
    story.topicName.toLowerCase().includes(lowerQuery) ||
    story.category.toLowerCase().includes(lowerQuery) ||
    (story.userId?.name && story.userId.name.toLowerCase().includes(lowerQuery))
  );
});
```

Sorting stories

```
const Home = ({ isLoggedIn, setIsLoggedIn }) => {
 const stripHtml = (html) => {
   const doc = new DOMParser().parseFromString(html, 'text/html');
   return doc.body.textContent | '';
 };
 const sortStories = (stories, criteria, order) => {
   return stories.sort((a, b) => {
      let valueA, valueB;
     if (criteria === 'title') {
       valueA = stripHtml(a.topicName || '').toLowerCase();
       valueB = stripHtml(b.topicName || '').toLowerCase();
      } else if (criteria === 'createdAt') {
       valueA = new Date(a.createdAt);
       valueB = new Date(b.createdAt);
     if (order === 'asc') {
       return valueA < valueB ? -1 : valueA > valueB ? 1 : 0;
      } else {
       return valueA > valueB ? -1 : valueA < valueB ? 1 : 0;
```

```
const filteredStories = stories.filter((story) => {
    const lowerQuery = searchQuery.toLowerCase();
    return (
        story.topicName.toLowerCase().includes(lowerQuery) ||
        story.category.toLowerCase().includes(lowerQuery) ||
        (story.userId?.name && story.userId.name.toLowerCase().includes(lowerQuery))
    );
});
const sortedStories = sortStories(filteredStories, sortCriteria, sortOrder);
```

Translation(json files and codes)

```
Appjex (1 bnjson x @ SignUpFormjax 15 userRoutes js

frontend > src > locales > 0 bnjson > ...

| "welcome": "soyoo তে বাগতম",
| "greetings": "এখনেই আপনার সৃত্তননীগতাকে মুক্তি দিন",
| "login!: "গাইম",
| "logiv!": "গাইমা",
| "home! "বেম",
| "home! "বেম",
| "home! "বেম",
| "writing": "নিয়া হক করন",
| "roticle": (আগর্ভিজ্জ)
| "writing": "নিয়া হক করন",
| "login success! "গাইম সহলা',
| "opsclame": "বিষয়ের নাম",
| "createstory": "বুল না তির করন",
| "opsclame": "বিষয়ের নাম",
| "action": "আন্তন্তগর",
| "aning": "বিয়া হলনা,
| "Adventure": আন্তন্তগর",
| "aning": "হলানীসি',
| "home": "ইমারসা,
| "hystery": "রহনা,
| "hystery": "বিয়ান",
| "science Fiction": "বিজ্ঞান কর্ব্বাহিনী",
| "nguage": "তামান্য,
| "language": "তামান্য,
| "hystery": "বিয়ান",
| "hystery": "বিয়ানা,
| "hystery: "বিয়ানা,
| "hystery: "বিয়ানান,
| "hystery: "বিয়ানান,
| "hystery: "বিয়ানান,
| "hystery: "বিয়ানাননান,
| "hystery: "বি
```

```
{} bn.json
                                                     JS userRoutes.js
App.jsx
                          X SignUpForm.jsx
ntend > src > locales > {} bn.json > ...
       "ChapterContent": "অধ্যায়ের বিষয়বস্তু",
       "SaveDraft": "খসড়া হিসাবে সংরক্ষণ করুন",
       "Publish": "প্রকাশ করুন",
       "Cancel": "বাতিল করুন",
       "1": {
           "topicName": "কান্না নয়",
           "description": "জীবন আমার কান্না। তাই জীবন মানেই কান্না",
           "chapters": "*কামার শব্দ বাড়ছে*"
      },
"2": {
          "topicName": "মিউ মিউ",
"description": "মিউ মিউ মিউ মিউ মিউ মিউ মিউ মিউ মিউ
           "chapters": ""
     },
"3": {
"t
           "topicName": "দুঃস্বপ্ন",
           "description": "অনেক ভয়ের একটি কাহিনী",
           "chapters": "একটি সাদা পোশাক পরা মহিলা প্রাসাদের করিডোরে চলাফেরা করছে..."
      },
"4": {
           "topicName": "দুঃস্বপ্ন",
           "description": "অনেক ভয়ের একটি কাহিনী",
           "chapters": "একটি সাদা পোশাক পরা মহিলা প্রাসাদের করিডোরে চলাফেরা করছে..."
           "topicName": "দুঃস্বপ্ন",
           "description": "অনেক ভয়ের একটি কাহিনী",
           "chapters": "যা লিখেছি তা দেখানোর কথা ছিল, সংরক্ষিত থাকার কথা। এখন..."
       "6": {
           "topicName": "একটি গল্প",
           "description": "df",
           "chapters": "প্রকাশিত?"
      },
"7": {
```

```
},
"7": {
      "topicName": "একটি গল্প",
      "description": "df",
      "chapters": "প্রকাশিত?"
      "topicName": "হাই",
      "description": "hkjhgv",
     "chapters": "okokokokokol"
},
"9": {
"to
      "topicName": "হাই",
      "description": "hkjhgv",
      "chapters": "okokokokokol"
},
"10": {
      "topicName": "আমার জীবনের গল্প",
      "description": "মারা খাই",
      "chapters": "মৃত"
 "11": {
      "topicName": "আমার জীবনের গল্প",
      "description": "মারা খাই",
      "chapters": "মৃত্"
},
"12": {
      "topicName": "স্বপোর একটা স্টুপিড",
     "description": "খুব খারাপ বন্ধু (মর্জা করছি)",
"chapters": "সে গ্রিন রোডে থাকে। সে একমাত্র সন্তান। সে একজন ভালো বন্ধু..."
     "topicName": "উবরে এক সফর",
"description": "শিক্ষার্থীদের জীবন, যেখানে ক্লাসের তিন ঘন্টা আগে প্রস্তুতি নিতে হয়...",
"chapters": "অনেকেই ক্লাসের তিন ঘন্টা আগে প্রস্তুত হতে হয়..."
```

```
"14": {
     "topicName": "উবরে এক সফর",
     "description": "শিক্ষার্থীদের জীবন, যেখানে ক্লাসের তিন ঘন্টা আগে প্রস্তুতি নিতে হয়...",
     "chapters": "অনেকেই ক্লাসের তিন ঘন্টা আগে প্রস্তুত হতে হয়..."
"15": {
     "topicName": "কেউ জানে না",
     "description": "হেহহিহিহি হেহহে হাহাহা",
     "chapters": "দয়া করে আমাকে কিছু বলুন। মানুষ এসব কীভাবে ম্যানেজ করে?!! আমার..."
},
"16": {
     "topicName": "হ্যারি পুটার",
     "description": "জাদুকরী জগৎ",
    "chapters": "নাস্তায় একটি তর্ক হয়েছিল..."
"17": {
     "topicName": "হ্যারি পটার এবং চেম্বার অফ সিক্রেটস",
     "description": "ডারসলিরা হ্যারির সাথে খারাপ আচরণ করেছিল",
    "chapters": "ডারসলিরা ভুলেও আজকের দিনটি যে হ্যারির জন্মদিন তা মনে রাখেনি..."
"18": {
     "topicName": "ডেমো",
     "description": "ডেমো",
     "chapters": ""
"19": {
     "topicName": "fbirebf",
     "description": "ndsjvbhfdbhfr",
     "chapters": "blaaaaaaaaa"
},
"20": {
"to
     "topicName": "পাটেসিনা",
     "description": "সাহায্য করুন",
     "chapters": ""
```

```
"21": {
        "topicName": "সাম কে হত্যা করা",
        "description": "আমি আমার সেরা বন্ধুকে হত্যা করার চেষ্টা করেছিলাম।",
        "chapters": "অধ্যায় ১: এটি ২০১৪ সালে শুরু হয়েছিল।"
},

"loading": "লোড হচ্ছে...",
        "storyerror": "গল্প আনতে ক্রটি",
        "untitled_story": "শিরোনামহীন গল্প",
        "no_description_available": "কোন বর্ণনা নেই",
        "no_chapter_available": "কোন অধ্যায় নেই",
        "story_not_found": "গল্প পাওয়া যায়নি"
}
```

```
App.jsx
              {} en.json
                               SignUpForm.jsx
                                                    JS userRoutes.js
ontend > src > locales > {} en.json > ...
 1
       "welcome": "Welcome to SOYO",
       "greetings": "This is where you unleash your creativity",
       "login": "Login",
       "logout": "Logout",
       "signup": "Sign Up",
       "home": "Home",
       "Menu": "menu",
       "Contact Us": "contact us",
       "profile": "Profile",
       "writing": "Start Writing",
       "login_success": "log in success",
       "createStory": "Create a New Story",
       "TopicName": "Topic Name",
       "Description": "Description",
       "Category": "Category",
18
         "Action": "Action",
         "Adventure": "Adventure",
         "Fanfiction": "Fanfiction",
         "Fantasy": "Fantasy",
         "Horror": "Horror",
         "Humor": "Humor",
         "Mystery": "Mystery",
         "Poetry": "Poetry",
         "Romance": "Romance",
         "Science Fiction": "Science Fiction",
28
       "Tags": "Tags",
       "Language": "Language",
         "English": "English",
         "Bangla": "Bangla",
         "Writechapter": "Write your chapter",
         "title": "Title",
         "ChapterContent": "Chapter Content",
         "SaveDraft": "Save as Draft",
```

```
"chapters": ""
},
"21": {
    "topicName": "Killing Sam",
    "description": "I tried to kill my best friend. ",
    "chapters": "Chapter 1: It all started back in 2014."
},

"loading": "Loading...",
    "storyerror": "error fetching story",
    "untitled_story": "untitled story",
    "no_description_available": "no description available",
    "no_chapter_available":"no chapter available",
    "story_not_found": "story not found"
}
```

```
App.jsx
               JS i18n.js
                           ≍ SignUpForm.jsx
                                                    JS userRoutes.js
frontend > src > JS i18n.js > ...
      import i18n from 'i18next';
      import { initReactI18next } from 'react-i18next';
      import LanguageDetector from 'i18next-browser-languagedetector';
       import translationEN from './locales/en.json';
       import translationBN from './locales/bn.json';
      const resources = {
         en: {
          translation: translationEN,
        bn: {
         translation: translationBN,
       };
       i18n
         .use(LanguageDetector)
         .use(initReactI18next)
         .init({
          resources,
           lng: 'en', |
 23
           fallbackLng: 'en',
          interpolation: {
           escapeValue: false,
         });
      export default i18n;
```

traslation.js

Navbar.jsx

```
<div className="language-switcher">
  <button onClick={() => changeLanguage('en')}>English</button>
  <button onClick={() => changeLanguage('bn')}>বাংলা</button>
</div>
```

Recaptcha

```
SignUpForm.jsx X Js userController.js
                                                                                                  JS userRoutes.js
frontend > src > components > SignUpForm > 🐯 SignUpForm.jsx > 😥 SignUpForm > 😥 handleSignUpClick
        import React, { useState, useRef } from 'react'; //useref
       import { useNavigate} from 'react-router-dom';//
import './SignUpForm.css';
       import Recaptcha from 'react-google-recaptcha';//
       const SITE_KEY = '6LfWnkQqAAAAAL06jAknTRQnylkYGW1A0V_TyRQH'; //
       const SignUpForm = ({ onClose, onLoginClick, setUser, setIsLoggedIn }) => {
         const navigate= useNavigate();//
         const [name, setName] = useState('');
const [email, setEmail] = useState('');
         const [password, setPassword] = useState('');
         const [confirmPassword, setConfirmPassword] = useState('');
         const [error, setError] = useState('');
         const [success, setSuccess] = useState('');
const [recaptchaValue, setRecaptchaValue] = useState('');//
          const captchaRef = useRef();//
            const handleSignUpClick = async (e) => {
              e.preventDefault();
                captchaRef.current.reset();
                 setError('Please complete the CAPTCHA');
```

```
if (!recaptchaValue) {
    setError('Please complete the CAPTCHA');
    return;
try {
 const response = await axios.post('/api/user/signup', { name, email, password, recaptchaValue});
 console.log('Signup response:',response.data);
  if (response.status === 201) {
    localStorage.setItem('token', response.data.token);//
    setSuccess('Sign up successful!');//
   setError('');//
   setIsLoggedIn(true);//
    setUser(response.data.user.name);//
   navigate('/Home');
   onClose();//
  } else {
   console.log('Error response data:', response.data);
    setError(response.data.error);
catch (error) {
 console.error('Signup error response:', error.response?.data || error);
 setError(error.response?.data?.error);
finally {
 captchaRef.current.reset();
```

Backend Development

- Login/signup
- Profile picture upload/change/delete

```
const mongoose = require('mongoose');
const Schema = mongoose.Schema;

const userImageSchema = new Schema({
    userId: {
        type: mongoose.Schema.Types.ObjectId,
        ref: 'User',
        required: true
    },
    image: {
        type: String,
        required: true
    }
});

module.exports = mongoose.model('UserImage', userImageSchema);
```

```
const storage = multer.diskStorage({
 destination: (req, file, cb) => {
   cb(null, 'public/Images');
 filename: (req, file, cb) => {
   cb(null, `${file.fieldname}_${Date.now()}${path.extname(file.originalname)}`);
const upload = multer({ storage: storage });
app.post('/upload', upload.single('file'), (req, res) => {
 const { userId } = req.body;
 console.log('File received:', req.file);
  if (!userId) {
   return res.status(400).json({ success: false, error: 'User ID is required' });
 const imageUrl = `/public/Images/${req.file.filename}`;
  UserImage.create({ userId, image: req.file.filename })
   .then(result => res.json({ success: true, result }))
   .catch(err => {
     console.log(err);
     res.status(500).json({ success: false, error: 'Database error' });
```

Published/Drafted stories

```
// POST a new story (Draft or Publish)
router.post('/', async (req, res) => {
  const { topicName, description, category, tags, language, chapters, status, _id } = req.body;
 if (!topicName || !description || !category || !tags || !language || !status) {
   return res.status(400).json({ error: 'All fields are required' });
   const storyData = {
     userId: req.user. id,
     topicName,
     description,
     category,
     tags,
     language,
     chapters: chapters || '', // Use chapters field
     status,
     author: req.user._id
    let story;
    if (_id) {
     story = await Story.findByIdAndUpdate( id, storyData, { new: true, runValidators: true });
     return res.status(200).json({ message: 'Story updated successfully', story });
    } else {
     // Create a new story (either draft or publish)
     story = await Story.create(storyData);
      return res.status(201).json({ message: 'Story created successfully', story });
    if ( id) {
      story = await Story.findByIdAndUpdate(_id, storyData, { new: true, runValidators: true });
      return res.status(200).json({ message: 'Story updated successfully', story });
      story = await Story.create(storyData);
     return res.status(201).json({ message: 'Story created successfully', story });
  } catch (error) {
    console.error('Error creating or updating story:', error);
    res.status(500).json({ error: 'Server error, please try again later' });
```

Modify/save stories

```
router.get('/published', async (req, res) => {
  const { searchQuery } = req.query;
  const searchRegex = new RegExp(searchQuery, 'i');
  try {
    let query = { status: 'published' };
    if (searchQuery) {
      query = {
        status: 'published',
       $or: [
          { topicName: searchRegex },
          { category: searchRegex },
          { tags: searchRegex }
    const stories = await Story.find(query).populate('userId', 'name');
    const filteredStories = stories.filter(story => story.userId.name.match(searchRegex));
    res.status(200).json(filteredStories);
  } catch (error) {
    console.error('Error fetching published stories:', error);
    res.status(500).json({ error: 'Failed to fetch stories' });
router.get('/drafts', async (req, res) => {
   const drafts = await Story.find({ userId: req.user._id, status: 'draft' });
    res.status(200).json(drafts);
  } catch (error) {
   console.error('Error fetching drafts:', error);
    res.status(500).json({ error: 'Failed to fetch drafts' });
```

Add tags

```
const router = express.Router();

router.use(requireAuth);

router.post('/', async (req, res) => {
    const { topicName, description, category, tags, language, chapters, status, _id } = req.body;

if (!topicName || !description || !category || !tags || !language || !status) {
    return res.status(400).json({ error: 'All fields are required' });

try {
    const storyData = {
        userId: req.user._id,
        topicName,
        description,
        category,
        tags,
        language,
        chapters: chapters || '',
        status,
        author: req.user._id
};
```

Changeable title/description styles

```
// GET a specific story by ID
router.get('/:id', async (req, res) => {
   try {
     const story = await Story.findById(req.params.id);
     if (!story) {
        return res.status(404).json({ error: 'Story not found' });
     }
     res.status(200).json(story);
   } catch (error) {
      console.error('Error fetching story:', error);
     res.status(500).json({ error: 'Failed to fetch story' });
   }
});
```

Search functionality

```
router.get('/published', async (req, res) => {
  const { searchQuery } = req.query;
  const searchRegex = new RegExp(searchQuery, 'i');
    let query = { status: 'published' };
    if (searchQuery) {
     query = {
       status: 'published',
        $or: [
          { topicName: searchRegex },
          { category: searchRegex },
          { tags: searchRegex }
    const stories = await Story.find(query).populate('userId', 'name');
    const filteredStories = stories.filter(story => story.userId.name.match(searchRegex));
    res.status(200).json(filteredStories);
  } catch (error) {
    console.error('Error fetching published stories:', error);
    res.status(500).json({ error: 'Failed to fetch stories' });
```

Sorting stories

```
// GET a specific story by ID
router.get('/:id', async (req, res) => {
    try {
        const story = await Story.findById(req.params.id);
        if (!story) {
            return res.status(404).json({ error: 'Story not found' });
        }
        res.status(200).json(story);
    } catch (error) {
        console.error('Error fetching story:', error);
        res.status(500).json({ error: 'Failed to fetch story' });
    }
});
```

Recaptcha

```
import User from '../models/userModel.js';
import jwt from 'jsonwebtoken';
import Story from '../models/storyModel.js';
import axios from 'axios';

const RECAPTCHA_SECRET_KEY = process.env.RECAPTCHA_SECRET_KEY;

// Create JWT token
const createToken = (_id) => {
    return jwt.sign({ _id }, process.env.SECRET, { expiresIn: '3d' }); // Expires in 3 days
};
```

```
export const signupUser = async (req, res) => {
    const { name, email, password, recaptchaValue } = req.body;
    if (!recaptchaValue) {
       return res.status(400).json({ error: "ReCAPTCHA token is missing" });
       const recaptchaResponse = await axios.post(
            https://www.google.com/recaptcha/api/siteverify,
               params: {
                   secret: process.env.RECAPTCHA SECRET KEY,
                   response: recaptchaValue
       if (!recaptchaResponse.data.success) {
           console.error('reCAPTCHA verification error:', recaptchaResponse.data['error-codes']);
           return res.status(400).json({
               error: "ReCAPTCHA verification failed",
               details: recaptchaResponse.data['error-codes']
       const user = await User.signup(name, email, password);
       const token = createToken(user._id);
       res.status(201).json({ email, user, token });
    } catch (error) {
```

Technology (Framework, Languages)

Framework: MERN stack Languages: Javascript, CSS

GitHub Repository

Link: https://github.com/Lamiaaaaaaaaaa/CSE471-Project.git

Individual Contribution:

ID	Name	Contribution	
21301062	Jannatul Ferdaus	Profile picture upload/change/delete, changeable title/description styles, publish stories, sorting stories	
21301191	Annonna Dev Nipa	login/signup,change/save/d elete drafts,	
21301105	Tangena Islam	Modify/save stories, add tags, search functionalities	
21301196	Swachcha Podder	Authentication/Recaptcha Translation using i18next & .json file	