News Site

Full Stack Project

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Table of Contents

[1. Preface 2](#_Toc64390026)

[2. Simple use cases 3](#_Toc64390027)

[2.1. News story overview 3](#_Toc64390028)

[2.2. Liking and sharing 3](#_Toc64390029)

[2.3. Commenting 4](#_Toc64390030)

[2.4. Account management 4](#_Toc64390031)

[3. Content moderation 5](#_Toc64390032)

[3.1. Moderation actions overview 5](#_Toc64390033)

[3.2. Uploading picture assets 5](#_Toc64390034)

# Preface

This software project has been developed to satisfy the requirements of Helsinki University course *Full Stack Project*. The software implements a simple news site platform, allowing administrators to publish and edit news stories and readers to leave anonymous or authenticated comments on articles.

The news service works by running an express backend on Heroku. The backend serves a production build of the frontend bound to a wildcard route. This way, all requests that are not handled by an API endpoint are handled by the production front end. News items, comments and user information are stored in a database. Heroku Postgres is utilized since it can be accessed without adding a credit card to Heroku account. Queries are handled using Sequelize, enabling straightforward migrations to other types of SQL databases such as MySQL.

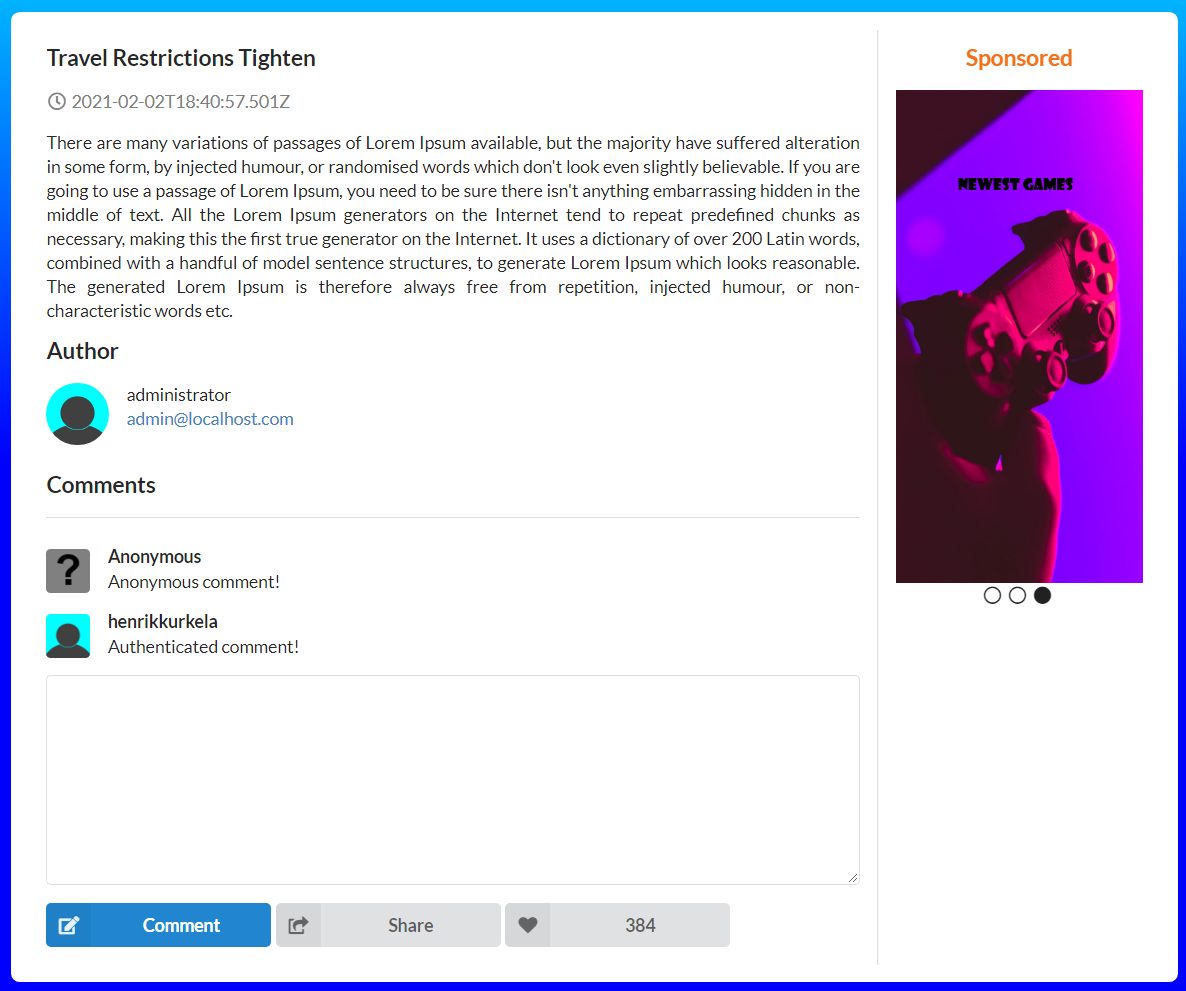
The frontend uses Semantic UI React as a styling framework. Semantic along with Material were recommended by a fellow, though more advanced, programmer. Of these two Semantic UI was chosen mostly by first impressions while skimming through the framework documentation, but also by chance. For http requests, axios was used. Axios was a natural choice since it was used during the *Full Stack Open* course as well. State management was implemented with redux, which was also used during the *Full Stack Open* course.

Building the project was a hugely educational endeavour, which greatly deepened the author’s React skills, especially regarding state management. The biggest takeaway however was the fact that the wheel should not be reinvented. Many a challenge was solved using own solutions, but as the project progressed, these solutions usually turned out to be inadequate. This caused a few incidents of large efficiency losses, as the original coding was completely removed and replaced with a solution utilizing a community-made package. The biggest of these mistakes was to use hand-written MySQL queries with the Node MySQL driver. The queries had a lot of challenging issues, for example with hyphenation in queries. In hindsight starting with an ORM library, such as Sequelize, would have been more than worth the initial time investment to grasp the basics of the library.

# Simple use cases

In this chapter, some simple use cases for normal and anonymous users are covered. These actions are commenting, liking, and sharing news items, as well as personal account management.

## News story overview



*Illustration of a typical news item view.*

## Liking and sharing

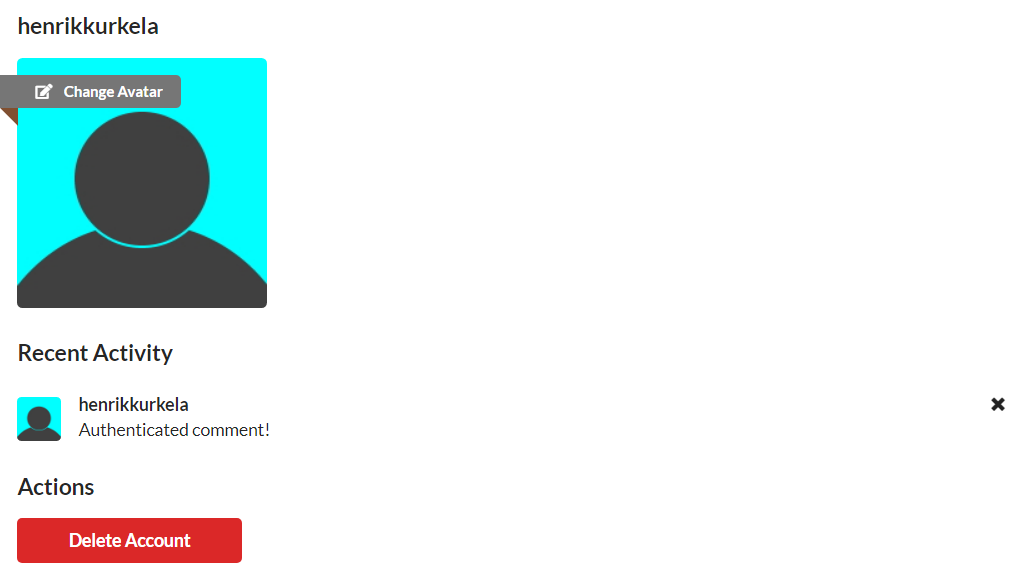
Liking and sharing are the bread and butter of any modern social media platform. News Site is no different in this regard and allows both anonymous and authenticated users to like and share news items to their hearts content. The grey like and share buttons are found on the bottom of a news item, right below the comment box.

## Commenting

To leave comments, simply click a news item on the site and scroll down to the comment section and start typing. A comment may be left anonymously, but anonymous comments may only be deleted by an administrator. Posting the typed comment may be done either by pressing enter, or by clicking the blue comment button right below the comment box.

Authenticated comments are comments left by users who have created an account on the News Site service and are currently logged in on said account. These comments differ from anonymous comments in two ways. The obvious difference is the fact that the username and avatar are displayed right next to the comment. The second difference is that authenticated comments may be deleted by the commenter if desired.

## Account management



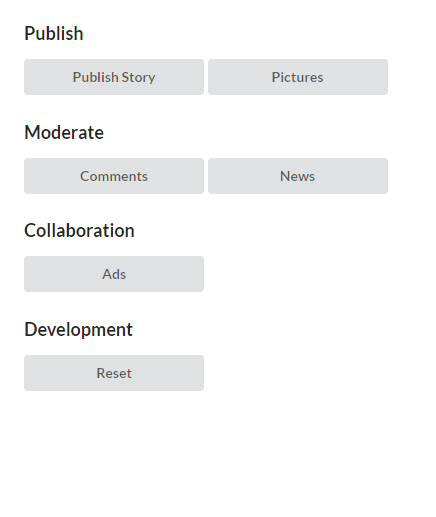
*Illustration of a typical user account management view*

While logged in authenticated users can review and manage their account by clicking a link labelled account at the top right corner of the page. Users may change their avatar by clicking their current avatar picture, review their comment history and delete their own comments, and if desired, unregister from the service completely by clicking the red delete account button.

# Content moderation

News Site platform has a comprehensive administration panel available to authenticated administrators. The tools may be accessed by clicking a link labelled moderation, only available to authenticated administrators, at the top right corner of the page. This chapter covers the basics of the most important moderation tools.

## Moderation actions overview



*Illustration of moderation panel available for authenticated administrators*

## Uploading picture assets

Picture assets may be uploaded by clicking the pictures button on the moderation panel. This will make an upload box available. The pictures view also displays all current picture assets available. Unneeded picture assets may be deleted by clicking them and selecting the delete option. Notice that some picture assets belong to the default configuration of the News Site platform and may not be deleted.