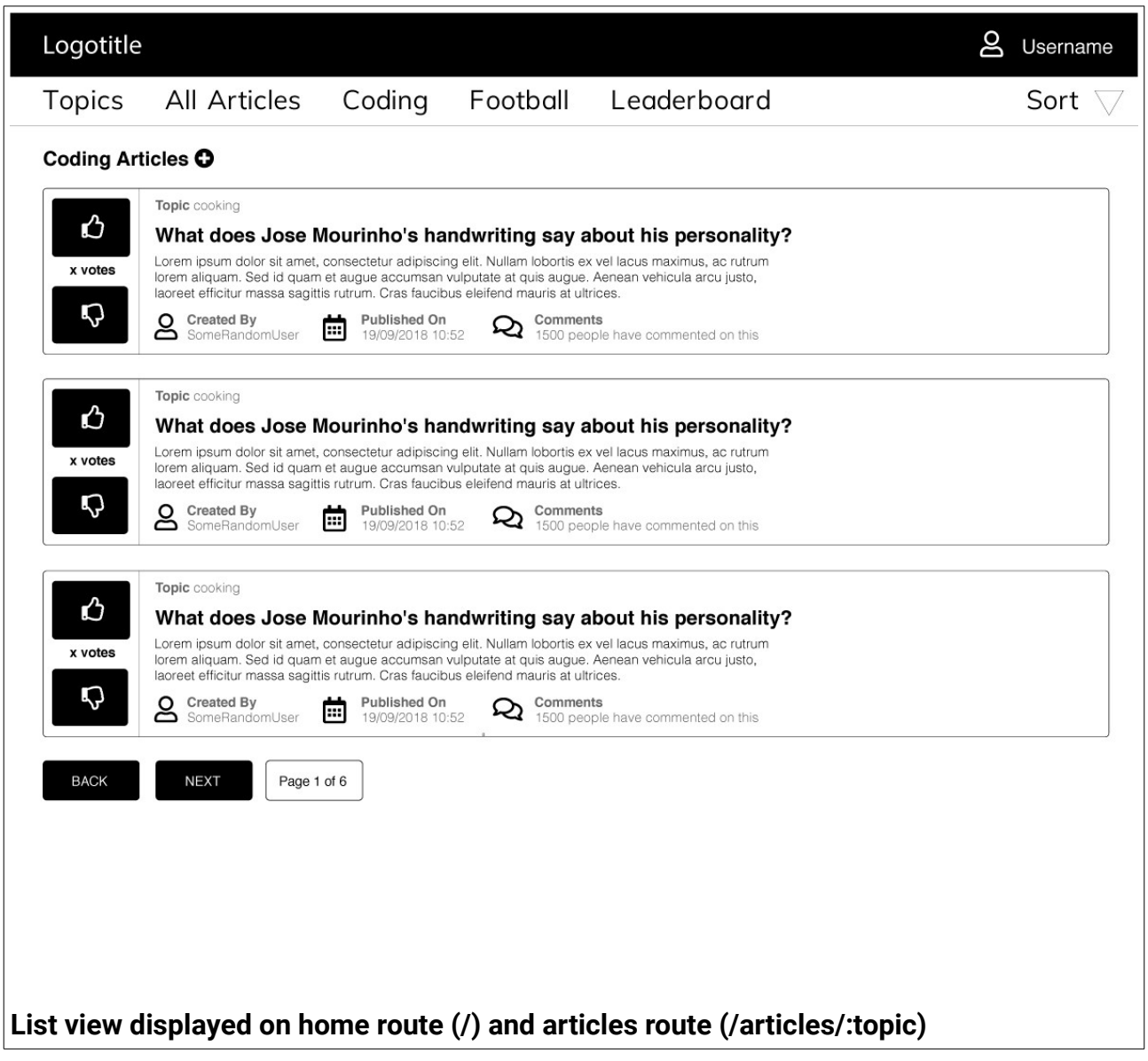
Introduction

Northcoders News has articles which are divided into topics. Each article has user curated ratings and can be up or down voted using the API. Users can also add comments about an article. Comments can also be up or down voted. A user can add comments and remove any comments which they have added.

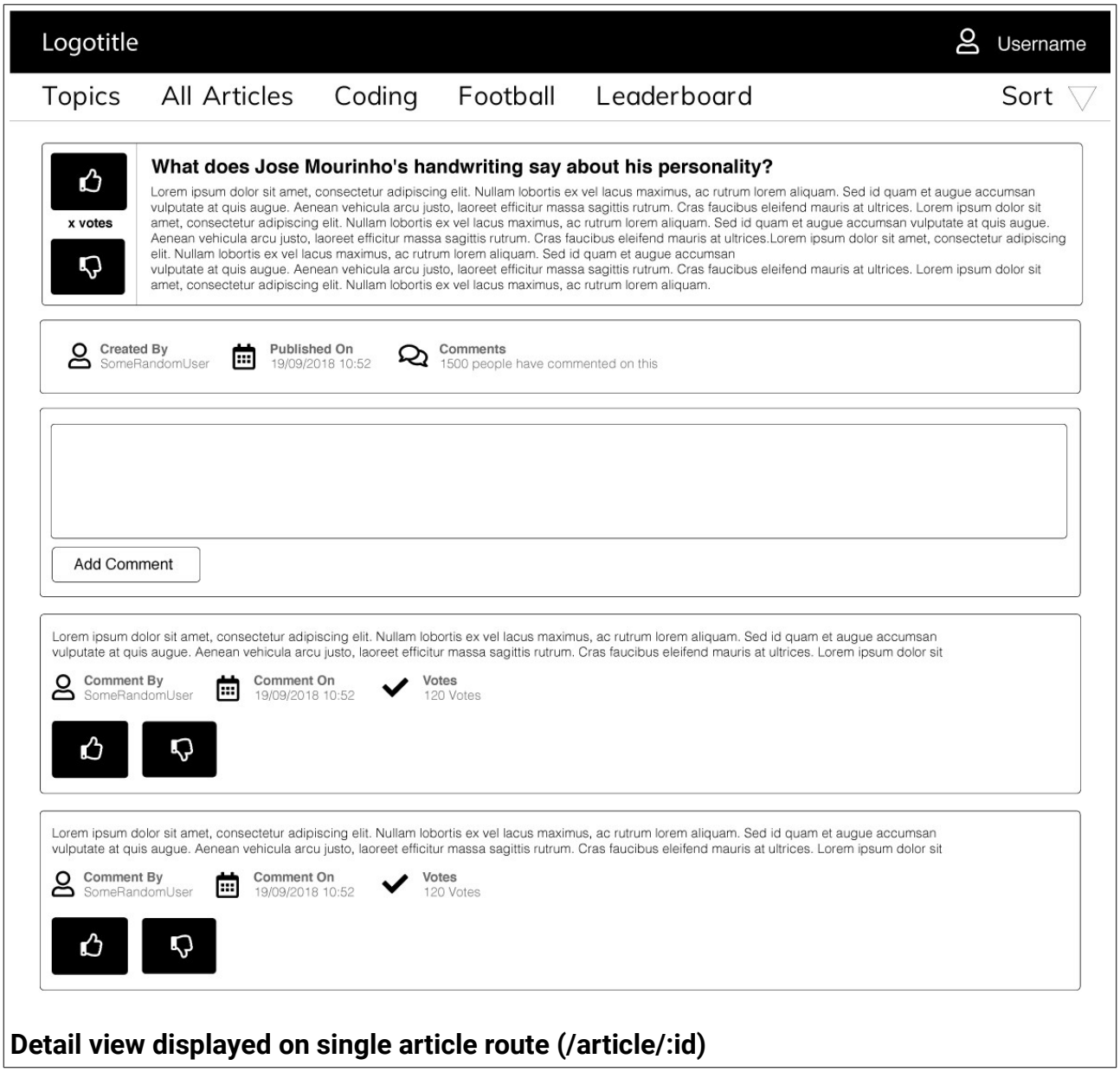
Voting, adding comments or adding articles are reserved only to logged in users. Although no “real” authentication system users can login to the system as the user by clicking on a user avatar picture.

App Views

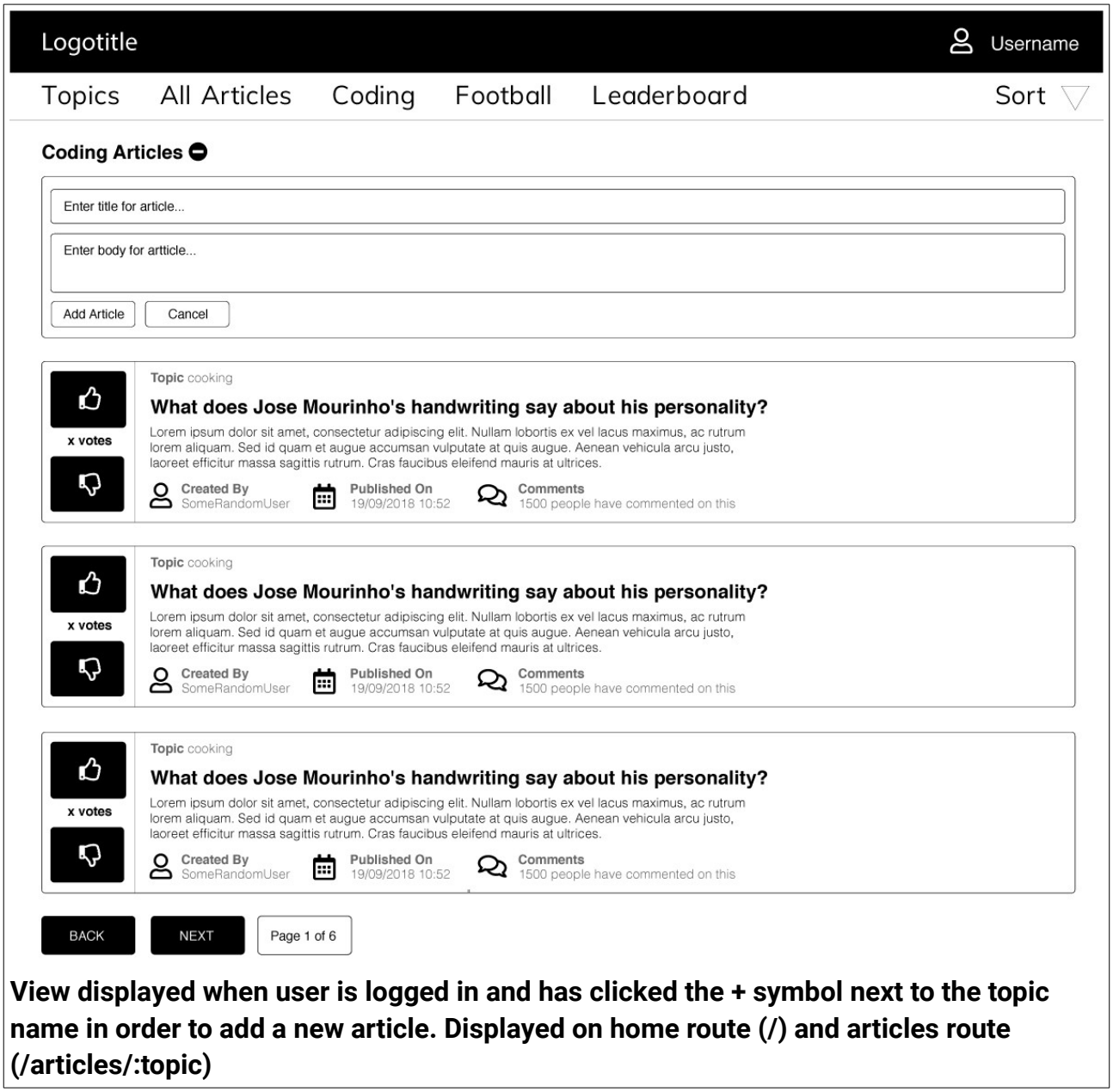
The following are the main app views for the Northcoders news app



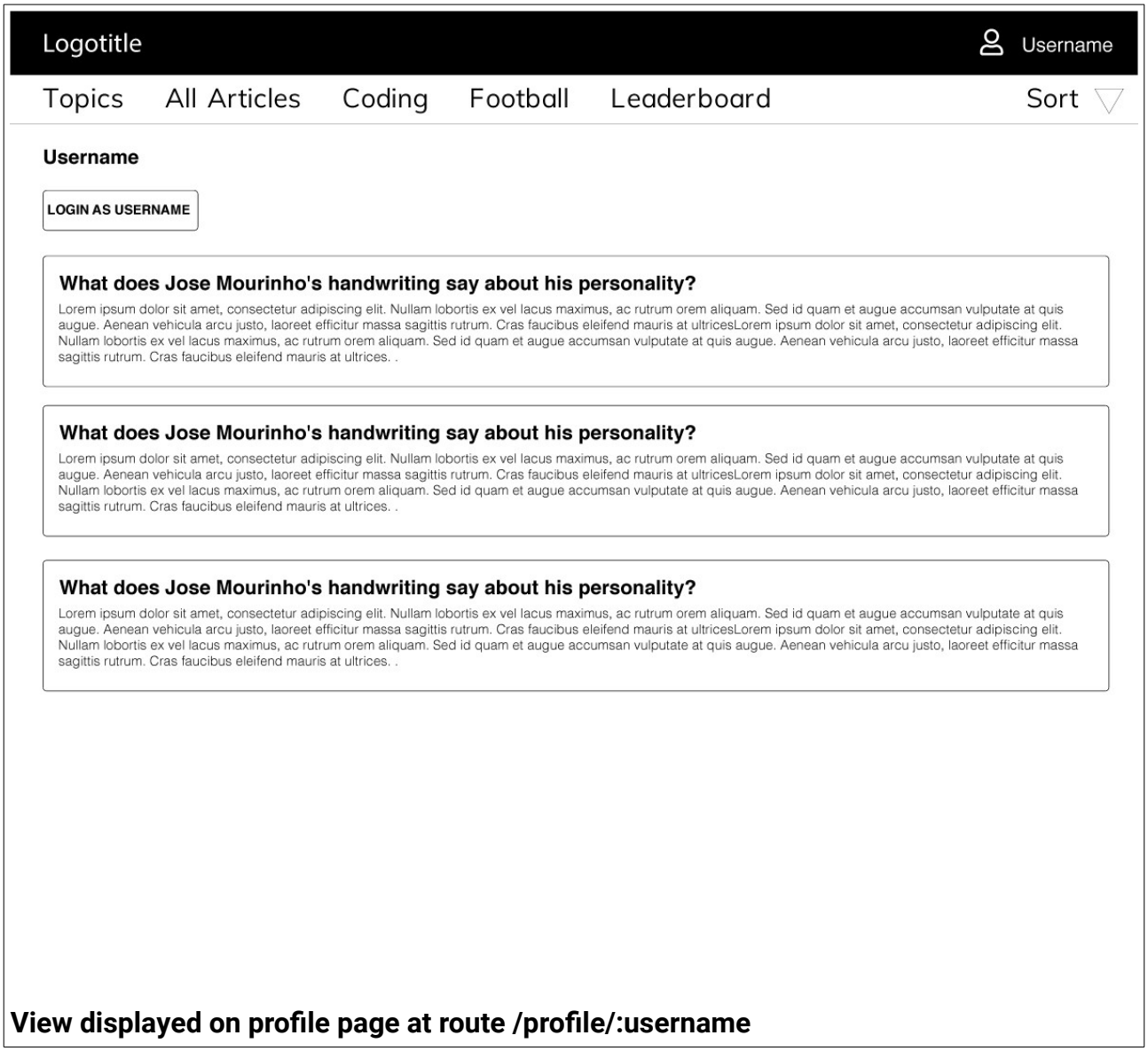
List view displayed on home route (/) and articles route (/articles/:topic)



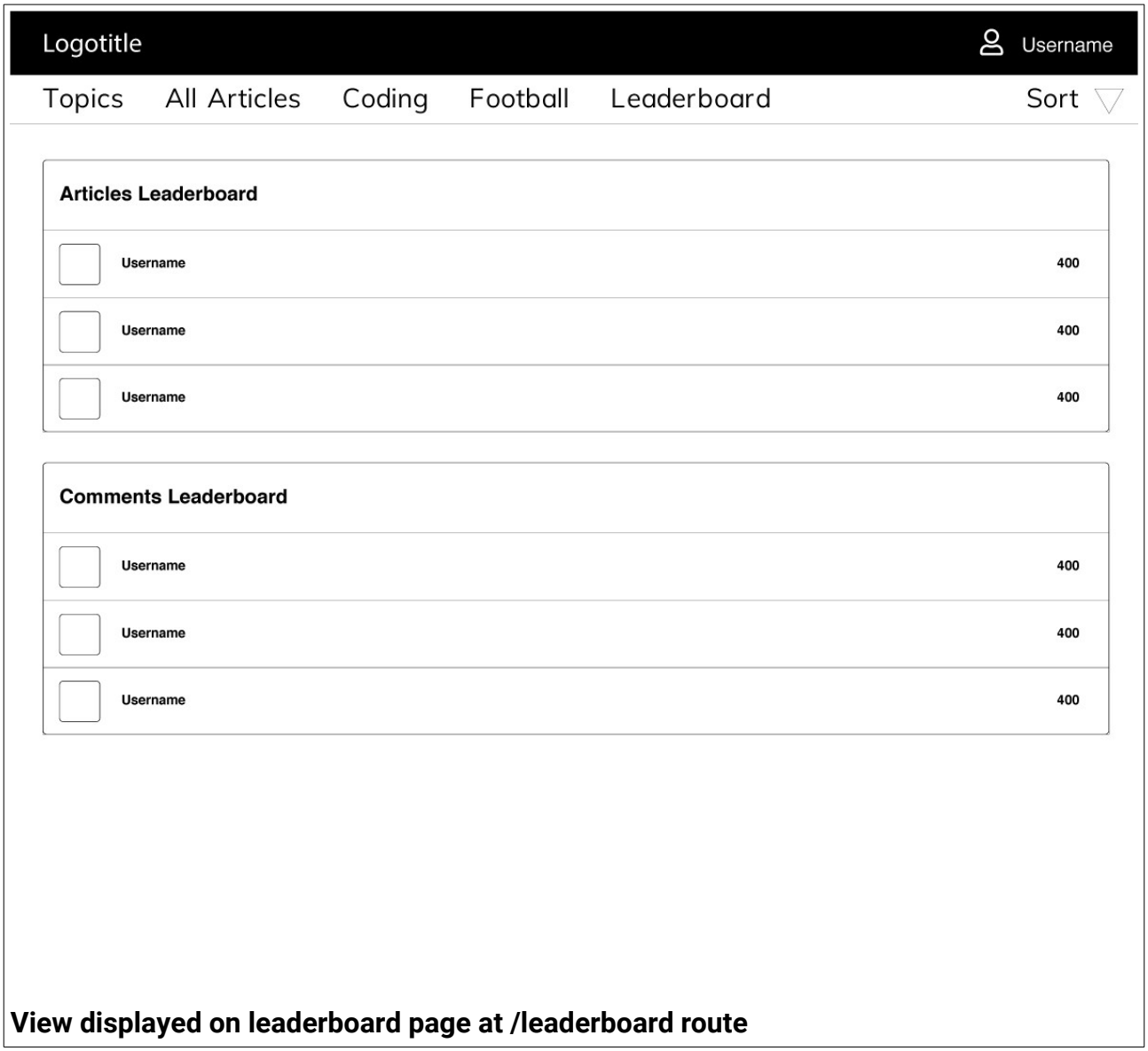
Detail view displayed on single article route (/article/:id)



View displayed when user is logged in and has clicked the + symbol next to the topic name in order to add a new article. Displayed on home route (/) and articles route (/articles/:topic)



View displayed on profile page at route /profile/:username



View displayed on leaderboard page at /leaderboard route

Routes

Route	Description
/	Home route displays list of all articles
/articles/:topic	All articles for topic
/article/:id	Details for single article
/profile/:username	Returns profile details for selected user
/leaderboard	Displays counts for articles and comments by user
/404	Displayed on 404 error
/400	Displayed on 400 error
/500	Displayed on 500 error

Components

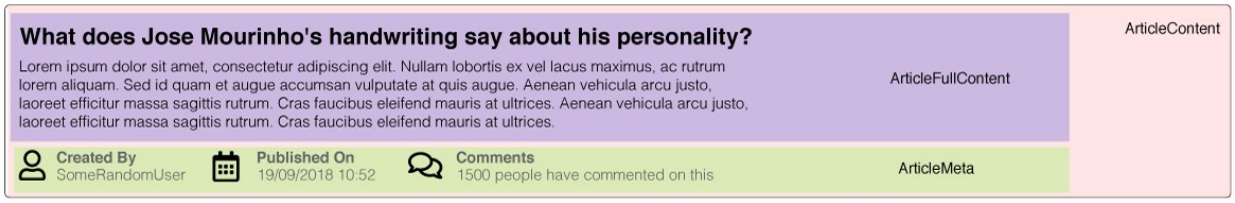
Name	Description
App	Main app component
Layout	Layout component
Header	Header with login / logout / profile menu items
Topics	Displays topics and sorting button
Articles	Displays list of articles
ErrorRedirect	Redirects to error page on error occuring
ArticleForm	Form to allow entry of new article
NoArticles	Displayed on no articles being found
ArticleContent	Container for article content displayed in list or in full
ArticleVote	Vote on article
ArticleVoteHistory	History of how someone voted on article
ArticleTeaserContent	Displays article content for list – truncates text
ArticleMeta	Displays user who created, date created and number of comments
ArticlePager	Displays buttons to page list of articles
LoadingDialog	Displays buttons to page list of articles
ArticleFullContent	Shows or hides a loading dialog when interacting with API
Comments	Displays article content for full article
CommentForm	List of all comments
Comment	Allows for entry of comment
CommentVote	Single comment item
CommentVoteHistory	Vote on comment
Profile	History of how someone voted on comment
Leaderboard	Displays user profile
AppError	Displays leaderboard positions for users
	Displays error message for various status codes

Component Layout

ArticleContent component when logged in and inside articles component

ArticleContent component when logged out and inside articles component

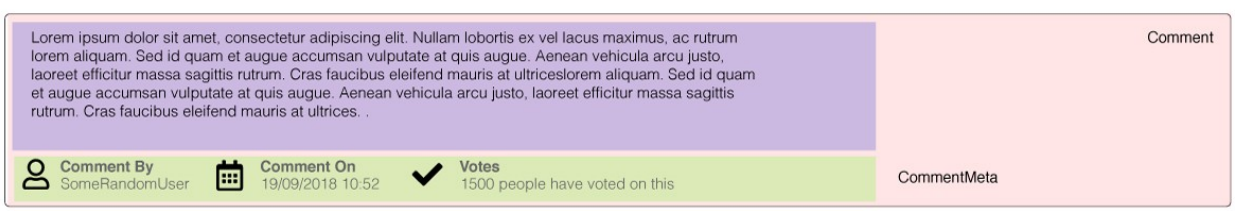
ArticleContent component when logged in and having voted inside articles component



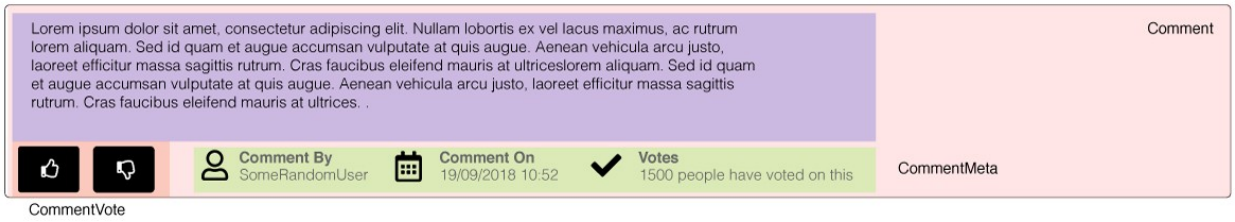
ArticleContent component when logged out inside single article component

ArticleContent component when logged in but not voted inside single article component

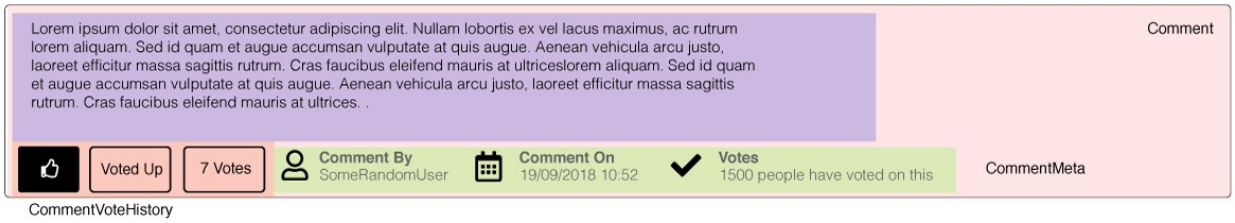
ArticleContent component when logged in and having voted inside single article component



Comment component when logged out



Comment component when logged in



Comment component when logged in an voted

Component Hierarchy

The following component hierarchy will apply for various routes

Home route (/) and articles route (/articles/:topic)

```
App
    Layout
        Header
        Topics
        Articles
            ErrorRedirect
            ArticleForm
            NoArticles
            ArticleContent
                ArticleVote
                ArticleVoteHistory
                ArticleTeaserContent
                ArticleMeta
            ArticlePager
            LoadingDialog
```

Single article route (/article/:id)

```
App
    Layout
        Header
        Topics
        Article
            ErrorRedirect
            ArticleContent
                ArticleVote
                ArticleVoteHistory
                ArticleFullContent
                ArticleMeta
            Comments
                ErrorRedirect
                CommentForm
                Comment
                    CommentMeta
                    CommentVote
                    CommentVoteHistory
                LoadingDialog
```

Profile route (/profile/:username)

```
App
    Layout
        Header
        Topics
        Profile
```

Leaderboard route (/leaderboard)

```
App
    Layout
        Header
        Topics
        Leaderboard
```

Route for 404, 400 and 500 errors (/400, /404 and /500)

```
App
    Layout
        Header
        Topics
```

AppError

State

Component	Values	Description
App	user	Stores the currently logged in user details or false if no user is logged in.
App	sorting	String value representing how data in articles should be sorted. Initially set to sort-by-date-desc in order to display newest data first.
Header	el	Value represents the element to attach the user profile menu to.
Topics	topics	Array representing the topics loaded via HTTP request to api
Topics	el	Element to attach the sorting menu to
Topics	error	Has the HTTP request caused an error that should be displayed. By default set to false.
Articles	articles	Array representing the articles and loaded via HTTP request
Articles	panelOpen	Boolean value representing if the add article form panel is open or closed
Articles	voteArticleId	Set when the user votes on an article and used to disable additional clicks
Articles	direction	Is the vote an up or down vote
Articles	isLoading	Is the articles HTTP request ongoing.
Articles	error	Set if an error occurs in HTTP request
Articles	currentPage	Current page set on paging and initially set to 1
Articles	pageSize	Number of results to return per page
Articles	totalPages	The total number of pages there will be
Articles	voteHistory	When a user votes on an article the voteHistory array has the article._id added to it.
ArticleForm	title	The value of the title textbox

ArticleForm	body	The value of the body textbox
ArticleForm	error	The error message to display if fields missing
Comments	comments	Array of comments for article loaded via HTTP request
Comments	voteCommentId	Last comment voted on used to disable buttons
Comments	direction	Direction of vote (up or down)
Comments	isLoading	Is the HTTP request ongoing to load comments
Comments	error	Has an error occurred when loading via HTTP
Comments	voteHistory	When a user votes on a comment the voteHistory array has the comment._id added to it.
CommentForm	body	The body field for comment
CommentForm	error	A validation error if data not entered correctly
Profile	user	The user that was requested and loaded via HTTP request
Profile	articles	Articles for the selected user loaded via HTTP request
Profile	error	Set if an error occurred during HTTP request
Leaderboard	articles	Set via HTTP request with the stats for leaderboard of articles added count per user
Leaderboard	comments	Set via HTTP request with the stats for leaderboard of comments added count per user
Leaderboard	error	Set if an error occurred during HTTP request
Leaderboard	isLoading	Set during loading of information during HTTP request

State Changing Functions

Function Name	Location	Changes State In	Description
changeLoggedInUser	App	App	Updates state for user on App
logoutUser	App	App	Updates state for user on App
changeSorting	App	App	Updates state for sorting on App
handleMenu	Header	Header	Updates state for el on Header
HandleClose	Header	Header	Updates state for el on Header
logoutCurrentUser	Header	App	Calls logoutUser on App
componentDidMount	Topics	Topics	Changes topics state on Topics On error changes error on Topics
handleClick	Topics	Topics	Updates state for el on Topics
handleClose	Topics	Topics	Changes state for el on Topics Calls changeSorting on App
componentDidUpdate	Articles	Articles	Changes state for currentPage
getArticles	Articles	Articles	Changes isLoading state Changes articles state Changes totalPages state Changes error state on error
addArticle	Articles	Articles	Changes articles state Changes isLoading state Changes error state on error
voteOnArticle	Articles	Articles	Changes voteArticleId state Changes direction state Changes articles state Changes direction state Changes voteHistory state Changes error state on error
goBackPage	Articles	Articles	Changes currentPage state
goNextPage	Articles	Articles	Changes currentPage state
togglePanel	Articles	Articles	Changes panelOpen state
handleChange	ArticleForm	ArticleForm	Changes title or body state
togglePanel	ArticleForm	ArticleForm	Changes title, body and error state
addArticle	ArticleForm	ArticleForm	Sets error on validation error

			Sets title, body on submitted
voteOnArticle	Via ArticleVote	Articles	Calls voteOnArticle function in Articles to change state in Articles
changeLoggedInUser	Via ArticleMeta	App	Calls changeLoggedInUser function in App to change state in App
backPage	Via ArticlePager	Articles	Calls goBackPage function in Articles to change state in Articles
nextPage	Via ArticlePager	Articles	Calls goNextPage function in Articles to change state in Articles
getComments	Comments	Comments	Sets isLoading state Sets comments state Sets error state on error
addComment	Comments	Comments	Sets comments state Sets isLoading state Sets error state on error
voteOnComment	Comments	Comments	Sets voteCommentId state Sets direction state Sets comments state Sets voteHistory state Sets error state on error
deleteComment	Comments	Comments	Sets isLoading state Sets comments state Sets error state on error
handleChange	CommentForm	CommentForm	Sets body state
addComment	CommentForm	CommentForm	Sets error state on error Sets body and error on no error
deleteComment	CommentForm	Comments	Calls deleteComment function on Comments parent component and affects state in Comments
voteOnComment	CommentForm	Comments	Calls voteOnComment function on Comments parent component and affects state in Comments
changeLoggedInUser	Profile	App	Calls changeLoggedInUser

			function in App to change state in App
getUserArticles	Profile	Profile	Sets articles state Sets isLoading state Sets error state on error
getUserProfile	Profile	Profile	Sets user state Sets error state on error
getStatsForUser	Leaderboard	Leaderboard	Sets isLoading state Sets articles state Sets comments state Sets error state on error

Outcomes

Site pretty much came together as originally planned. Going further I would…

- Add a search facility – I have added already added the endpoint for search to backend.
- Add additional sort orders – by vote
- Add functionality to order comments