|  |
| --- |
| * Download nodeJS ( Runtime for Javascript without browser )   (npm gets downloaded with nodeJS)  Node –version  Npx --version   * VS Code editor * React devTools chrome extension * VS Code plugins :  1. Thunder client 2. ES7 react/redux/graphQl/ react native snippet 3. Bracket pair colorizer 4. Auto rename tag 5. Live server 6. Prettier – code formatter |
| * Search on google : [create react app](https://create-react-app.dev/docs/getting-started/) * npx create-react-app . * npm start * src/components.js * difference between props & states * src/App.js is visible on browser * npm run build : used for optimized version for production |
| * Refresh Javascript * For client side programming, nodeJS entered, then extended to use it with Angular, React * Do console.log in <script> and check result in browser console * <script> ‘use strict’; </script> use strict mode inside script tag. * Call back function : set timeout and execute further script by blocking the function for sometime only * Promises = resolve / reject * Cheatsheet links on YT channel of CodeWithHarry |
| * JSX * [Official doccumentation](https://legacy.reactjs.org/docs/introducing-jsx.html) * Index.js is entry point * React will show all the code inside index.js on browser * Everything written inside return is JSX      * Only changes in JSX as compared to HTML are : * className is used instead of class * use camelCase * We must return only one tag / one element in JSX. “<> </>” * 14:00 = do this setting in vscode, to get JS suggestions * Babel compiles JSX down to react.createElement(){ } |
| 1. Multi page website 2. Single page website  * React notes * TextUtils App  1. Npx create-react-app 2. Add bootstrap 2 CDN links in index.js 3. Remove index.css file |
| * JS named export * JS Default export * Make src/components folder * rfc (type it to create function-based-component template in vscode simple…..) * Work with NavBar.js & App.js * <NavBar title=”TextUtils”/> : React Props are passing * [Official doccumentation](https://legacy.reactjs.org/docs/introducing-jsx.html) * [bootstrap](https://getbootstrap.com/docs/5.3/components/accordion/) * Props must be Read-Only * If you forget how to write proptypes, search react proptypes to get doc page * Props * Proptypes * Default proptypes : if values are not passed, then use it. |
| * rfc = react function based component * State belongs to component          * React states :      * Uppercase * Lowercase * Number of words and characters * Preview * Time to read * Copy to clipboard * Clear text  1. Const[text,setText] 2. Value={text} inside required html tag 3. Onchange={handleOnClick} 4. Def of handleOnClick() |
| * Enable Dark Mode * Add About Us page * [bootstrap](https://getbootstrap.com/docs/5.3/components/accordion/) * Javascript object * Css(style) is written using react\_state * onClick()          * State variables are used to make dark/light mode |
| * I want to hadle dark/light mode through App.js itself * Make state in App.js  1. Make state 2. Pass state to component, now we can use it as props.title in that component. 3. Write function and use state inside it        * Below(else part) is correct, setMode is function * Add style={JS {obj }} to textarea      * When back tick is used then we can use $ and variable inside that string with ticks`` * We are toggling mode from App.js * Variable mode is declared in App.js, passing it to NavBar and TextForm components as props, then using props.mode in components. |
| * Dismissable Alert Component * Copy from bootstrap, replace class to className= * Alert should be supplied as props * Add Alert below navbar      * Make Alert state : * Make showAlert function : with msg , type parameters, in App.js * Now alert became object, use it as “ props.alert.type “      * Show alert when dark mode is enabled       * Capitalize ‘S’ in success      * Add alert to showUpperCase, lowercase, copy buttons      * Once dismissed, we need to reload page, to show alert again * I want alert to get dismiss after 2 seconds * Added timeout in showAlert() function in App.js |
| Exercise 2 :   1. Add color pallete switches in NavBar, when clicked that green pallete mode should be enabled 2. Space is counted as word, fix it using Javascript  * I made switch, new toggle function but its not working |
| * Change title dynamically and add favicon to TextUtils * Change meta description, title of page * in web browser * Change title dynamically as “ TextUtils-Light Mode “ and “TextUtils-Dark Mode” in browser |
| * React router setup * Website should not reload when we change page * NavBar and footer are constant on page, no need to fetch them again & again from server * To make website fast * I want to show About page, commenting TextForm.js  1. Npm install react-router-dom 2. Add router to App.js 3. Replace href with link, to inside NavBar.js, in all components      1. Add {Link} in all components |
| * Host website free : * Use github-pages for hosting application * [Deployment of create-react-app](https://create-react-app.dev/docs/deployment/) search Github Pages   npm run build 🡪Creating an optimized production build...  Github\_repo 🡪 settings 🡪 pages 🡪  But react app is not easy to deploy, so take help of deployment doc  React-router doesn’t work good with github pages, so react=router is removed, and then app is deployed   * Href=/ is replaced with href=# So that it won’t show 404 Not Found error * Link and to, all the references of router are removed from app. For deployment     Site is live at : <https://aishwaryap95.github.io/TextUtils_App_React_Course/> |
| * Make website as it is with router * Remove line added for deployment from package.json * npm uninstall gh-pages * npm run build * npm run deploy |
| * Fixing issues with TextUtils  1. Space counted as word 2. In mobile view, buttons don’t hv space in between them 3. Layout shift bcoz of dismissable alert 4. Cursor is invisible in darkMode textarea 5. 0.08 minutes to read empty textarea is problem, it should be zero minutes 6. Buttons are working even if text is not present in textarea 7. Click about then reload page > 404 not found error 8. Dark mode is improved 9. SEO so meta tags description added 10. Enable https 11. After copying text, text inside textarea is getting selected, it should not be selected 12. Remove comments in production  15. Set height to alert page      1. Problem with textarea background      1. Same filter is added here, of word count 2. To disable buttons      1. Go to nginx > sites available > add required line > request redirected to index.html   Watch deployment playlist   1. About page improved, btn of dark mode on about page is removed. 2. Change meta description, title changed, heading/title of textArea 3. To make copy JS function work, enable https |
| * Exercise 2 = make custome pallete in NavBar * Primary-secondary-success-danger modes * Change toggleMode()   Arrow function inside javascript object. |
| * Fixing more issues of TextUtils : * Error : new line word should be counted, (output - 3)      * In App.js * In textForm.js * Remove console.log for production ready software * Remove all comments for production ready software |
| App 2 – newsApp   * Class based components in react * npx create-react-app newsapp * npm run start * News API : zero fee for developers * previously we were using rfc(function-based), now write rce(class-based) * state , props are different in rce than rfc * this. Is used to access it as it is class (this dot) * NavBar, News, NewsItem, NewsDetail components * Remove index.css, remove rfc & add rce in App.js * Title, meta description  1. Make NavBar component : src/components/Navbar.js 🡪 copy navbar code from bootstrap 🡪 class to className, <input/> 🡪 Add NavBar in App.js 🡪 keep home & about tabs only 🡪 see console 2. src/components/News.js 🡪 Add in App.js 3. src/components/NewsItem.js 🡪 Add in News.js 4. Fetch API key 🡪 copy sampleOutput.json from website and make file 🡪 login to make account 🡪 copy API key 🡪 download jsonView extension to see result formatted in browser(view page source) 🡪 copy & paste api link on top headlines page to browser 🡪 copy&paste this response in sampleOutput.json      1. Bootstrap 🡪 components/card copy code 🡪 paste in newsItem.js 🡪 add props as below 🡪 make style as JS function 🡪 check console 🡪 make row of 3 newsItems using col-md-3 4\*3=12       News.js     * Exercise : Now read all instrunctions and make website without looking at code.  1. State in class\_based\_components : Constructor(){ super(); } 🡪 should be written like this to avoid error 🡪 add it inside newsItem.js   🡪 set states from constructor now 🡪 make articles array and use it in constructor to set state    [React class based components state](https://legacy.reactjs.org/docs/state-and-lifecycle.html)  Props can’t be changed, they are read-only  States can be changed, without reloading page  News can be identified by its url uniquely.   1. Looping through an array in jSX to display NewsItem :   I need to iterate through articles 🡪 keep only one newsItem in news component 🡪 when we iterate using map function, there should be unique keyed, given as key below 🡪 map function is written in News.js using JS\_arrow\_function  NewsItem.js  News.js  Read more button will work now : element.url  Description in card should be limited to some words use slice  But we are taking articles which are static in articles array, we need to use API to fetch real-time news.   1. Using Fetch API to populate NewsItems :   Previously we were using constructor & articles array to populate news  Now we are using componentDidMount() life cycle method, which runs after render  Now we will change articles but not in constructor instead in componentDidMount() 🡪 async&await used together 🡪 handle error if title/author/description is null using ternary operator 🡪 only 20 articles are visible on browser, but total 40 are there, so fetch them using next button 🡪 remove articles array now bcoz componentDidMount is there & update constructor with empty array 🡪 news are populating bcoz url is given inside componentDidMount()  News.js  News.js  NewsItem.js   1. Adding previous and Next Buttons :   (this.state.page is added in url)  Actual articles are 40, but only 20 were visible 🡪 Make state and add page into it, by default page=1, added in constructor 🡪    Add 2 buttons in div container in News.js 🡪 Add buttons in bootstrap flexbox class, to place them at the start and end of line 🡪 Previous arrow html are added    Next button 🡪 onClick – handleNextClick() & handlePrevClick() 🡪 disable the previous button when on 1st page 🡪 write prev and next btn logic 🡪      Totalresults = 38, pagesize = 2 therefore number of pages = 19  News.js    It won’t load the next page, if articles are not present.  Previous won’t work when on 1st page |
| * Disable next btn if news are not available      * Send all data as props 🡪 previously we have hardcoded pageSize so make pageSize as variable using backticks and $ 🡪 replace all pagesize=20 with {this.props.pageSize}, use &pageSize      * Components/Spinner.js 🡪 Add spinner img in src folder 🡪 import image in spinner.js 🡪 use text-center 🡪 use loading as state to show it whenever necessary 🡪 if loading is true then only show spinner (following syntax) 🡪 nextBtn code is improved 🡪 make loading true & false in prev & next buttons 🡪 As the data is fetched make this.setState(loading : true) and and as data is present make loading : false in setState 🡪 make loading true&false when first request is going in componentDidMount() 🡪 when I am clicking on next then all content should be invisible and spinner should be displayed     News.js  spinner before content is loaded |
| * Adding categories & propTypes to NewsMonkey App : * 2 endpoints to the News API : Everything, top headlines * Category of news works with top headlines * Make change in url, which is in News.js 🡪 replace country=in , country=${this.props.country} in News.js 🡪 <News country=”in”/> in App.js 🡪 and done 🡪 can we add propTypes in class based components 🡪 see doc page 🡪 Add categories 🡪 pass all categories as props 🡪 add all categories <li> tabs in NavBar 🡪 pass category as prop to <News/> , and also embed category in url 🡪 update propTypes and defaultProps 🡪 pass category into url - replave &apikey= to &category=&{this.props.category}&apikey= 🡪 done manually 🡪 we need to configure categories tab wise ,so do react-router-setup 🡪     propTypes.Number News.js  See the url in below image : Only country, category and pageSize is changed in url |
| * Fetching News categoriwise : * See react doc to setup react-router-dom 🡪 update href with (Link & to) 🡪 do router setup 🡪       NavBar.js  App.js  Error components are not mounting = exact is added, give unique key prop in App.js , to tell him to re-render |
| * Adding time, author, news source : * Find bootstrap card with “last updated 3 minutes ago”     Author and date=publishedAt is added    Pass as prop in let and as javascript object    If author is null then make it Unknown  Using javascript  Format the date and time using javascript  Add source on card, use badge in bootstrap 🡪 copy span {source} 🡪  News.js |
| * Refactoring News Component to use the same function : * Dh |