

# Hamoud Ebnou

## Software Developer

<https://ebnouhamoud.github.io/developerFolio>

### Contact

5045562886

[github.com/ebnouhamoud](https://github.com/ebnouhamoud)

[ebnou.hamoud1@gmail.com](mailto:ebnou.hamoud1@gmail.com)

### Technical Specs

JavaScript (ES6+),  
Typescript, Node.js, Java,  
Express, React, Redux,  
React Fiber, SQL,  
NoSQL, Redis, CI/CD,  
RESTful APIs, Jest,  
Enzyme, Webpack,  
JWTs, Cookies, jQuery,  
OOP and Functional  
Programing, - HTTP/1.1 -  
HTTP/2,  
WebSocket/socket.io,  
CSS/SCSS, Docker,  
Kubernetes, Nginx, Digital  
Ocean, NATS, NATS  
streaming Git, Agile,  
Scrum.

### Languages

English  
French  
Arabic

### Summery

- 5 years of experience engaging in the IT industry with focus on frontend development of modern web applications using HTML/HTML5, JavaScript, CSS/CSS3, Bootstrap, jQuery, ES6, JSON, React, Redux, React Router, Express, RESTful services, Node.js/Express, Webpack, Ajax, TypeScript, Babel, WebSocket, Docker, Kubernetes, Digital Ocean, Nats, Microservices Architecture, CI/CD.
- Strong proficiency in developing Single Page Applications (SPAs) utilizing JavaScript including React and other cutting edge development technologies.
- Profound experience in using Redux to manage the application state and applying middleware such as Redux-Promise and Redux-Thunk.
- Proficiency in using React Router to tackle routes in SPAs through dynamic and component-based routing.
- Prior knowledge working with Web protocols and standards (HTTP HTML5/XHTML/XHTML MP, CSS3, Web Forms, XML, XML parsers).
- Familiarity with the BEM naming strategy in using CSS to build easy to maintain, scalable, and reusable templates for web applications.
- Prior experience developing secured web applications by using client scripting such as JavaScript and jQuery along with the knowledge to deal with security challenges like XSS, CORS, and SQL injection.
- Professionalism working with the MERN tech stack (MongoDB, Express, React, Node.js).
- Strong expertise in RESTful, SOAP web services to integrate between application to application.
- Profound understanding of the full life cycle of software development and abilities to handle every phase properly.
- Experience using test runners like Jest, Enzyme, Mocha, Chai for unit tests.
- Abilities to perform version control using appropriate tools such as Git, SVN for source code version management.
- Knowledge of common development methodologies such as Agile, Scrum, Waterfall, etc.
- Excellent communication and inter-personal skills while always being well organized and goal oriented.

## Interests

Watching soccer and playing it. Favorite team Barca and player Messi. CoD warzone whenever I have some free time.

Astronomy always fascinates me, especially our beloved Sagittarius A star.

NYSE

June 2020 – Present

React Developer

New York, NY

### Project: Continuous Evaluated Pricing Tool (CEPT)

The CEPT is part of the company's electronic trading platform that helps clients adjust to changing dynamics by providing continuous, independent evaluated pricing to front, middle and back offices, extending the reach of fixed income end of day evaluations into intraday applications through establishing a premium access to timely updates. The CEPT also helps clients take advantage of pre-trade transparency, price discovery and idea generation, enhanced trading workflow to support ETF monitoring, trading and intraday internal crossing, post-trade best execution analysis, compliance and transaction cost analysis, support of intraday operational valuation processes and collateral, and real time risk and credit utilization monitoring. By using the CEPT, users can gain access to dynamic charts regarding trading workflow, real time risk and credit utilization, plus best execution analysis.

### Responsibilities

- Took responsibilities for developing SPA using HTML5, Bootstrap, CSS3, JavaScript, React, React Hooks, Redux, React Router, etc.
- Styled web pages using HTML5 and CSS3 as well as developed JavaScript for user interfaces in the SPA following given standards and requirements such as ADA and 508 Policy.
- Enhanced the React Observables with Redux, React Router, and Redux Thunk to enhance the application's functionality.
- Established WebSocket connections to maintain a real time application by employing the observer pattern to broadcast state change across channels for synchronized stocks.
- Implemented responsive design to boost better user experience for the multi-platform SPA using Redux, React Promise, CSS3, Bootstrap, etc.
- Developed and optimized graphic prototype for the website and application interfaces using HTML and CSS3 by creating easy to scale and maintain templates.
- Created a variety of screens for the frontend side using React and used different predefined components from NPM and Redux library.
- Implemented backend web APIs using the MERN technology stack and established connectivity using Axios.
- Used the testing and debugging frameworks like Jest and Enzyme to wrote unit tests for the SPA.
- Managed version control for the project and collaborated with others using Git.
- Followed the Agile software methodology throughout the development procedure.

**Environment:** React, Redux, React Router, Node.js, HTML5, CSS3, JavaScript, Express, RESTful services, Git, Jest, Enzyme, Axios, BEM, Agile/Scrum.

**Project: Internal Firm Services Tools Suite**

The Internal Firm Services Tools Suite (IFSTS) supports the company's core business functions by deploying applications that enable employees to work more efficiently and deliver the highest levels of service to clients. IFSTS enables teams to communicate business outcomes across the organization, allowing stakeholders to agree on a common set of objectives. Automatically update project financials with the actual time spent on each task. Managers can see teams' start and finish dates, booking status, estimated time of completion, total allocations, and total actuals. It also creates a visual task list on the task boards. It provides users with their process flow, assigns staff to tasks, and prioritizes work. Keep all team members in sync and share plans with other groups and executives. IFSTS's financial planning pages have been redesigned to mimic Microsoft Excel spreadsheets in both looks and feel. It provides one consolidated view of each employee's project queue and their schedule. Managers explore staffing options with telescoping and pinning features that replace outdated filtering and matching tools.

**Responsibilities**

- Participated in the designed and development of a secure, scalable, reliable and extendable SPA that is compatible with various browsers and platforms using ES6, React, Flux, Babel, Node.js and Webpack in the development of the SPA.
- Built modules for high performance data visualization dashboard using advanced React concepts such as higher order components (HOCs), render props, and pure Component.
- Worked on Redux for state manipulations and Redux Saga to implement API requests in an asynchronous manner.
- Achieved dynamic routing for the application using React Router.
- Created reusable and scalable CSS components by utilizing CSS preprocessor such as Scss for code maintainability and readability.
- Used RESTful web services to integrate between different applications.
- Wrote unit tests for the SPA using Jest and Enzyme.
- Fulfilled version control by extensively using Git in the project development.
- Reported to the Scrum master regularly and involved in other Agile development activities.

**Environment:** HTML5, CSS3, Scss, JavaScript, React, Redux, React Router, Node.js, Express, Scss, RESTful services, Axios, Jest, Enzyme, Git, Agile/Scrum methodologies.

### **Project: Controllership Project**

The Controllership Project is part of the Accounting and Internal Controls Portfolio that is built to help clients address issues and risks in accounting advisory services, financial reporting requirements, internal audit risk management, assurance needs, and internal controls services. It provides clients and their teams direct access to valuable insights that can help organizations and leaders become more proficient, effective, and insightful are three keys to achieving world class controllership. The project consists of Controllership labs, P2P exchanges, Eminence/Learning tools, and provides a virtual and controlled environment for the entire team to hold meetings, live webcasts, send/receive newsletters, publish and manage blogs, compose, distribute, and analyze reports.

### **Responsibilities**

- Designed and Developed interactive UI applications using HTML5, CSS3, Node.js, React, Ajax, and JSON.
- Built highly reusable UI components with React and implemented UI mockups, integrating third party React libraries. In charge of building dynamic web pages and dealing with asynchronous events using Ajax, JSON, and XML.
- Implemented Component life cycle architecture and store actions while using socket.io in React-Redux app to handle real time data as well as Thunk Redux for API calls in React.
- Used Redux to fulfill state maintenance and the pass around of stateless data in components for the SPA.
- Developed CSS templates reusable for all pages of the application via utilizing CSS history, setting, margin, padding, table, etc.
- Developed scalable and maintainable web components such as Button, Checkbox, Input Area, Icons, Toggle Button, dropdown Menu for reusable UI collections based on sought UI standards as well as suggestions using CSS preprocessor Scss.
- Used NPM to manage a variety of modules and install useful development tools such as Grunt and Express for the SPA.
- Implemented Middleware and Redux-Promise in the application to fetch data and perform restful services from the back end.
- Worked with Jest and Enzyme unit test frameworks to write unit test scripts for the SPA.
- Performed Push, Merge, and other version control activities using Git in the development process.
- Involved in daily Scrum meetings and communicated with the Scrum Master to keep track of the ongoing project status and issues.

**Environment:** React, Redux, HTML5, CSS3, Scss, JavaScript, Node.js, Express, RESTful services, Git, Ajax, Jest, Enzyme, Postman, Agile/Scrum.

**Project: Space and Resource Management Platform**

Finding and reserving the right space or resources is critical for success in a work or learning environment and being able to track what people are using and how often they use it can change the way to manage other areas of your organization. Accruent's room scheduling platform offers enterprise class management of workspaces, conferences, offices, classrooms, event spaces and more. The software helps to create a frictionless experience for browsing, booking and using the facilities, facilitates understanding of how people use and engage with the built environment so clients can make strategic decisions based on hard data. Increased visibility enhances clients' decision-making clarity, spanning their IT, facilities and maintenance departments.

**Responsibilities**

- Created the user interactive web pages professionally using web technologies like jQuery, HTML5, CSS and JavaScript following company's standards
- Developed a cross browser/platform web application using HTML, CSS, JavaScript, and jQuery.
- Developed content pages with CSS3 layouts and style markup presentations with JavaScript methods and properties.
- Created interactive graphic user screens with the help of JavaScript, jQuery, and Ajax.
- Strictly followed and implemented user interface guidelines plus standards throughout the development and maintenance of the application using HTML, CSS, and JavaScript.
- Created and deployed new features in order to sustain and amend the existing applications.
- Fetched data from web APIs by making Ajax and JSON calls to keep the DOM updated reflecting sets of outcomes.
- Used Mocha and Chai for unit testing of the web application.
- Managed version control using Git during the entire development process.
- Followed Agile/Scrum development methodologies.
- 

**Environment:** HTML, CSS, JavaScript, Bootstrap, jQuery, XML, JSON, Ajax, Visual Studio Code, Git.

# Open Source

## ReactMonitor

React Monitor is a dev tool that allows you to quickly visualize React's component tree performance for improved onboarding and debugging. By using the ReactMonitor Chrome DevTool, beginning and experienced developers alike are able to get a visual representation of an existing codebase that they are working on. Built with React, this tool will dynamically traverse the fiber root object behind the scenes, displaying state, props, render times and the type of components on the page.

### Responsibilities

- Utilized AGILE development best practices and modular programming to iterate on an open-source Chrome dev tool that helped visualize React's component tree performance and debug state in class components.
- Added time travel debugging by enabling developers to record all program activities at runtime (every component render, every state change, and benchmarks at every step), and then rewind and replay to identify and debug, performance drops, unnecessary rendering, and state.
- Added support for React hooks, Context API, and React Router by refactoring the fiber traversal algorithm and optimizing it.
- Modified an algorithm used to recursively travel through React fiber nodes for the user's app to distinguish components updating state and to subsequently subscribe to these changes and add functionality for cutting-edge tech in the React ecosystem.
- Migrated the functionality from npm package to chrome devtool so the user won't have to install an npm package which allows for more accurate performance benchmarks and a better user experience.
- Re-engineered D3 visualization implementation to integrate a responsive hide and unhide HTML elements in the node tree, zoom, and tooltip functionality on hover over each node to provide developers with updated state properties via closure to build a deeply nested object to dynamically render D3 visualization.