**1.** **My Info**

My Name: Louis Morand

My hourly rate: $70/hr

Address: Commerce, Georgia

Timezone : EST

Meeting time: 03:00 PM EST

Resume Link: <https://drive.google.com/file/d/1dPm4qtRuFqjyGSdW9feq7aTJO_jKlMxz/view>

Github: <https://github.com/lmorandp>

Portfolio: <https://louis-morand.netlify.app/>

Meeting link:

2. **My Overview**

Senior web (React/Node/Angular/Vue/C#/Unity) developer with professional skills and 10 years of experience in

software development companies. During that time, I was familiar with new technologies such as blockchain and

machine learning, and gained very valuable experience in software development and business logic.

Below check my core skills that I have used in my projects:

React.js, Node.js, Vue, Vuex, React Native, Redux, Redux Sagas, C#, Unity, Angular, MongoDB, MySQL,

WebSockets, HTML5/CSS3, Blockchain, Solidity, Rust, Web3, Test-Driven Development, Webpack, Git

<https://openclassrooms.com/>

Stacks: React, Node, Parcel, Algolia, Hubspot

OpenClassrooms is an online platform offering top quality, education-to-employment programs and career coaching services for students worldwide. I have built this website using MERN Stacks. My role was full stack developer & DevOps engineer on this company

Since I am a senior full stack developer with no blockages on both the front end and the back end who is very

attentive and seamless in project development, so I can help you greatly and you will achieve a successful

outcome.

Looking forward to working with you soon.

Thank you

Louis

**3.** **Job Info**

Customer: **Liuda Daniv**

Stack:JavaScript, HTML, CSS, React, Node, ...

Job Details:

She will explain about the position

.

**4.** **My Proposal**

Senior web (React/Node/Angular/Vue/C#/Unity) developer with professional skills and 10 years of experience in

software development companies. During that time, I was familiar with new technologies such as blockchain and

machine learning, and gained very valuable experience in software development and business logic.

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Looking forward to working with you soon.

Thank you

Louis

**5.** **Interview direction for success.**

* You will introduce about yourself based on “My overview”
* **Liuda** will explain about their business and workflow.
* You will let them know you have enough experience in their required skills and functionalities.
* They look like hiring the proper developer soon. So you have to be emphatic on our advantages.

· Start working immediately

· Dedicate full time

· Responsive communication on EST

· High-quality coding

· Keep the deadline

· Deliver the production in time

* At the end, you can simply ask when I can start working for their project.

**6.** **Note**

· If a customer asks for any personal info(email, github, etc) that doesn't exist on this doc, you can send it after finishing the talking.

· If they ask to turn on the camera, you can say you don’t have a webcam now.

**What is HTML in simple terms?**

**HTML** stands for Hyper Text Markup **Language**. **HTML** is the standard markup **language** for creating Web pages. **HTML** describes the structure of a Web page. **HTML** consists of a series of elements. **HTML** elements tell the browser how to display the content.

**What is CSS and why is it used?**

What is **CSS**? **CSS** is the language for describing the presentation of Web pages, including colors, layout, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers. **CSS** is independent of HTML and can be **used** with any XML-based markup language.

**What is JavaScript and why is it used?**

JavaScript is a text-based programming language used both on the client-side and **server**-side that allows you to make web pages interactive. Where HTML and **CSS** are languages that give structure and style to web pages, JavaScript gives web pages interactive elements that engage a user.

**What is a firebase used for?**

**Firebase** is a Backend-as-a-Service (Baas). It provides developers with a variety of tools and services to help them develop quality apps, grow their user base, and earn profit. It is built on Google's infrastructure. **Firebase** is categorized as a NoSQL database program, which stores data in JSON-like documents.

**What is TypeScript and why use it?**

**TypeScript** simplifies JavaScript code, making it easier to read and debug. **TypeScript** is open source. **TypeScript** provides highly productive development tools for JavaScript IDEs and practices, like static checking. **TypeScript** makes code easier to read and understand.

**What is React?**

React is an open-source, front end, JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single-page or mobile applications.

**Why do we use React?**

1. Simplicity

ReactJS is just simpler to grasp right away. The component-based approach, well-defined lifecycle, and use of just plain JavaScript make React very simple to learn, build a professional web (and mobile applications), and support it. React uses a special syntax called JSX which allows you to mix HTML with JavaScript. This is not a requirement; developers can still write in plain JavaScript but JSX is much easier to use.

2. Easy to learn

Anyone with a basic previous knowledge in programming can easily understand React while Angular and Ember are referred to as ‘Domain-specific Language’, implying that it is difficult to learn them. To react, you just need basic knowledge of CSS and HTML.

3. Native Approach

React can be used to create mobile applications (React Native). And React is a diehard fan of reusability, meaning extensive code reusability is supported. So at the same time, we can make IOS, Android and Web applications.

4. Data Binding

React uses one-way data binding and an application architecture called Flux controls the flow of data to components through one control point – the dispatcher. It's easier to debug self-contained components of large ReactJS apps.

5. Performance

React does not offer any concept of a built-in container for dependency. You can use Browserify, Require JS, EcmaScript 6 modules which we can use via Babel, ReactJS-di to inject dependencies automatically.

6. Testability

ReactJS applications are super easy to test. React views can be treated as functions of the state, so we can manipulate the state we pass to the ReactJS view and take a look at the output and triggered actions, events, functions, etc.

**1) What is Reactjs?**

React is a JavaScript library that makes building user interfaces easy. It was developed by Facebook.

**2) Does React use** [**HTML**](https://career.guru99.com/top-50-html-interview-questions/)**?**

No, It uses JSX, which is similar to HTML.

**3) When was React first released?**

React was first released in March 2013.

**4) Give me two most significant drawbacks of React**

· Integrating React with the MVC framework like Rails requires complex configuration.

· React requires the users to have knowledge about the integration of user interface into MVC framework.

**5) State the difference between Real DOM and Virtual DOM**

|  |  |
| --- | --- |
| Real DOM | Virtual DOM |
| It is updated slowly. | It updates faster. |
| It allows a direct update from HTML. | It cannot be used to update HTML directly. |
| It wastes too much memory. | Memory consumption is less |

**6) What is Flux Concept In React?**

Facebook widely uses flux architecture concepts for developing client-side web applications. It is *not* a framework or a library. It is simply a new kind of architecture that complements React and the concept of Unidirectional Data Flow.

**7) Define the term Redux in React**

Redux is a library used for front end development. It is a state container for JavaScript applications which should be used for the applications state management. You can test and run an application developed with Redux in different environments.

**8) What is the ‘Store’ feature in Redux?**

Redux has a feature called ‘Store’ which allows you to save the application’s entire State at one place. Therefore all it’s component’s State are stored in the Store so that you will get regular updates directly from the Store. The single state tree helps you to keep track of changes over time and debug or inspect the application.

**9) What is an action in Redux?**

It is a function which returns an action object. The action-type and the action data are always stored in the action object. Actions can send data between the Store and the software application. All information retrieved by the Store is produced by the actions.

**10) Name the important features of React**

Here are important features of React.

· Allows you to use 3rd party libraries

· Time-Saving

· Faster Development

· Simplicity and Composable

· Fully supported by Facebook.

· Code Stability with One-directional data binding

· React Components

**11) Explain the term stateless components**

Stateless components are pure functions that render DOM-based solely on the properties provided to them.

**12) Explain React Router**

React Router is a routing library which allows you to add new screen flows to your application, and it also keeps the URL in sync with what’s being shown on the page.

**13) What are the popular animation packages in the React ecosystem?**

Popular animation package in React ecosystem are

· React Motion

· React Transition Group

**14) What is Jest?**

Jest is a JavaScript unit testing framework created by Facebook based on Jasmine. It offers automated mock creation and a jsdom environment. It is also used as a testing component.

**15) What is a dispatcher?**

A dispatcher is a central hub of app where you will receive actions and broadcast payload to registered callbacks.

**16) What is meant by the callback function? What is its purpose?**

A callback function should be called when setState has finished, and the component is re-rendered.

As the setState is asynchronous, which is why it takes in a second callback function.

**17) Explain the term high order component**

A higher-order component also shortly known as HOC is an advanced technique for reusing component logic. It is not a part of the React API, but they are a pattern which emerges from React’s compositional nature.

**18) Explain the Presentational segment**

A presentational part is a segment which allows you to render HTML. The segment’s capacity is presentational in markup.

**19) What are Props in react js?**

Props mean properties, which is a way of passing data from parent to child. We can say that props are just a communication channel between components. It is always moving from parent to child component.

**20) What is the use of a super keyword in React?**

The super keyword helps you to access and call functions on an object’s parent.

**21) Explain yield catchphrase in JavaScript**

The yield catchphrase is utilized to delay and [resume](https://career.guru99.com/sample-functional-resume/) a generator work, which is known as yield catchphrase.

**22) Name two types of React component**

Two types of react Components are:

· Function component

· Class component

**23) Explain synthetic event in React js**

Synthetic event is a kind of object which acts as a cross-browser wrapper around the browser’s native event. It also helps us to combine the behaviors of various browsers into signal API.

**24) What is the React State?**

It is an object which decides how a specific component renders and how it behaves. The state stores the information which can be changed over the lifetime of a React component.

**25) How can you update state in react js?**

A state can be updated on the component directly or indirectly.

**26) Explain the use of the arrow function in React**

The arrow function helps you to predict the behavior of bugs when passed as a callback. Therefore, it prevents bug caused by this all together.

**27) What are the lifecycle steps of React?**

Important lifecycle steps of React js are:

· Initialization

· State/Property updates

· Destruction are the lifecycle of React

**28) State the main difference between Pros and State**

The main difference between the two is that the State is mutable and Pros are immutable.

**29) Explain pure components in React js**

Pure components are the fastest components which can replace any component with only a render(). It helps you to enhance the simplicity of the code and performance of the application.

**30) What kind of information controls a segment in React?**

There are mainly two sorts of information that control a segment: State and Props

· State: State information that will change, we need to utilize State.

· Props: Props are set by the parent and which are settled all through the lifetime of a part.

**31) What is ‘create-react-app’?**

‘create-react-app’ is a command-line tool which allows you to create one basic react application.

**32) Explain the use of ‘key’ in react list**

Keys allow you to provide each list element with a stable identity. The keys should be unique.

**33) What are children prop?**

Children props are used to pass components to other components as properties. You can access it by using prop

**34) Explain error boundaries?**

Error boundaries help you to catch Javascript errors anywhere in the child components. They are most used to log the error and show a fallback UI.

**35) What is the use of empty tags <> </>?**

Empty tags are used in React for declaring fragments.

**36) Explain strict mode**

StrictMode allows you to run checks and warnings for react components. It runs only on development builds. It helps you to highlight the issues without rendering any visible UI.

**37) What are the react portals?**

Portal allows you to render children into a DOM node. **CreatePortalmethod** is used for it.

**38) What is Context?**

React context helps you to pass data using the tree of react components. It helps you to share data globally between various react components.

**39) What is the use of Webpack?**

Webpack basically is a module builder. It mainly runs during the development process.

**40) What is Babel in React js?**

Babel, is a JavaScript compiler that converts the latest JavaScript like ES6, ES7 into plain old ES5 JavaScript that most browsers understand.

**41) How can a browser read a JSX file?**

If you want the browser to read JSX, then that JSX file should be replaced using a JSX transformer like Babel and then sent back to the browser.

**42) What are the major issues of using MVC architecture in React?**

Here are the major challenges you will face while handling MVC architecture:

· DOM handling is quite expensive

· Most of the time applications were slow and inefficient

· Because of circular functions, a complex model has been created around models and ideas

**43) What can be done when there is more than one line of expression?**

At that time a multi-line JSX expression is the only option left for you.

**44) What is the reduction?**

The reduction is an application method of handling State.

**45) Explain the term synthetic events**

It is actually a cross-browser wrapper around the browser’s native event. These events have interface stopPropagation() and preventDefault().

**46) When should you use the top-class elements for the function element?**

If your element does a stage or lifetime cycle, we should use top-class elements.

**47) How can you share an element in the parsing?**

Using the State, we can share the data.

**48) Explain the term reconciliation**

When a component’s state or props change then rest will compare the rendered element with previously rendered DOM and will update the actual DOM if it is needed. This process is known as reconciliation.

**49) How can you re-render a component without using the setState() function?**

You can use the forceUpdate() function for re-rending any component.

**50) Can you update props in react?**

You can’t update props in react js because props are read-only. Moreover, you can not modify props received from parent to child.

**51) Explain the term ‘Restructuring.’**

Restructuring is the extraction process of [array](https://career.guru99.com/top-50-array-interview-questions-answers/) objects. Once the process is completed, you can separate each object in a separate variable.

**52) Can you update the values of props?**

It is not possible to update the value of props as it is immutable.

**53) Explain the meaning of Mounting and Demounting**

· The process of attaching the element to the DCOM is called mounting.

· The process of detaching the element from the DCOM is called the demounting process.

**54) What is the use of ‘prop-types’ library?**

‘Prop-types’ library allows you to perform runtime type checking for props and similar objects in a recent application.

**55) Explain react hooks**

React hooks allows you to use State, and other React features without writing a class.

**56) What are Fragments?**

You can use fragment keywords to group a list of children components without using any extra nodes to the DOM.

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15 | render() {    return (    <React.Fragment>    <CompA />    <CompB />    <CompC />    </React.Fragment>  );  } |

**57) What is the main difference between createElement and cloneElment?**

· createElement is used by react to create react elements.

· cloneElement is used to clone an element and pass it new props.

**58) What are Controlled Components?**

Controlled components are component which controls the input elements.

**59) Why do you need to use props.children?**

This props.children allow you to pass a component as data to other components.

**60) List down some of the methods in a react-dom package**

Important methods for react-dom packages are:

· render()

· hydrate()

· createPortal()

· unmountComponentAtNode()

· findDOMNode()

**61) How can we do server-side rendering in React?**

We can use reaction serve to do the server-side rendering.

**62) State the difference between getIntialState() and constructor()?**

If you want to create one component by extending ‘React. Component’, the constructor helps you to initialize the State. But, if you want to create by using ‘Reat.createClass.’ then you should use ‘genInitiaState.’

**63) What is refs?**

Ref are an attribute of the DOM elements. The primary purpose of the refs is to find the DOM elements easily.

**64) What is ComponentWillMount()**

This function is called after the DOM element removes from DOM, and it will swipe the memory, which helps you to increase the access space.

**65) How to dispatch the data in-store?**

We can dispatch the data to another component which should be based on the action which stores the parent component.

**66) How will be you able to handle more action using redux?**

In order to create the same component in more action flow, we are using the same functionality in various modules.

**67) How can you spill the reducers?**

We can spill the rescues based on the event actions. That action should be split in separate modules.

**68) Name any five predefined prototypes used in React**

Most important protoype used in React js are:

· number

· string

· array

· object

· element

**69) What is the purpose of using bindActionsCreators?**

BindActionCreator helps you to bind the event based on the action dispatcher to the HTML element.

**70) What is REFS in React**

Ref is a reference to the element. It should be avoided in most cases. However, sometimes it is used when you need to access DOM or instance of the component directly.

**71) Can JSX element be attached to other JSX components?**

Yes, you can use attach JSX element with other JSX components which is very much similar to nesting HTML elements.

**72) What is the Current Stable Version of React?**

The current stable version of React is version 17.5

**73) Name out an important feature of Redux workflow features**

Important features of Redux workflow are:

· Reset: Helps you to reset the State of the Store

· Revert: Allows you to roll back to the last committed State

· Sweep: All disable action that you might fire by mistake will be removed

· Commit: Helps you to make the current State the initial State.

**74) State the difference between React JS and React Native**

React js is a front end open-source JavaScript library used for building UIs.

Rect Native, is an open-source, mobile framework which allows developers to user React on platforms like Android and [iOS](https://career.guru99.com/top-18-x-code-interview-questions/).

<https://www.guru99.com/node-js-interview-questions.html>

**1) What is node.js?**

Node.js is a Server side scripting which is used to build scalable programs. Its multiple advantages over other server side languages, the prominent being non-blocking I/O.

**2) How node.js works?**

Node.js works on a v8 environment, it is a virtual machine that utilizes JavaScript as its scripting language and achieves high output via non-blocking I/O and single threaded event loop.

**3) What do you mean by the term I/O ?**

I/O is the shorthand for input and output, and it will access anything outside of your application. It will be loaded into the machine memory to run the program, once the application is started.

**4) What does event-driven programming mean?**

In computer programming, event driven programming is a programming paradigm in which the flow of the program is determined by events like messages from other programs or threads. It is an application architecture technique divided into two sections 1) Event Selection 2) Event Handling.

How to use Shape Layer in Photoshop CC

**5) Where can we use node.js?**

Node.js can be used for the following purposes.

* Web applications ( especially real-time web apps )
* Network applications
* Distributed systems
* General purpose applications

**6) What is the advantage of using node.js?**

* It provides an easy way to build scalable network programs
* Generally fast
* Great concurrency
* Asynchronous everything
* Almost never blocks

**7) What are the two types of API functions in Node.js ?**

The two types of API functions in Node.js are

* Asynchronous, non-blocking functions
* Synchronous, blocking functions

**8) What is control flow function?**

A generic piece of code which runs in between several asynchronous function calls is known as control flow function.

**9) Explain the steps how “Control Flow” controls the functions calls?**

* Control the order of execution
* Collect data
* Limit concurrency
* Call the next step in program

**10) Why Node.js is single threaded**?

For async processing, Node.js was created explicitly as an experiment. It is believed that more performance and scalability can be achieved by doing async processing on a single thread under typical web loads than the typical thread based implementation.

**11) Does node run on windows?**

Yes – it does. Download the MSI installer from <https://nodejs.org/download/>

**12) Can you access DOM in node?**

No, you cannot access DOM in node.

**13) Using the event loop what are the tasks that should be done asynchronously?**

* I/O operations
* Heavy computation
* Anything requiring blocking

**14) Why node.js is quickly gaining attention from JAVA programmers?**

Node.js is quickly gaining attention as it is a loop based server for JavaScript. Node.js gives user the ability to write the JavaScript on the server, which has access to things like HTTP stack, file I/O, TCP and databases.

**15) What are the two arguments that async.queue takes?**

The two arguments that async.queue takes

* Task function
* Concurrency value

**16) What is an event loop in Node.js ?**

To process and handle external events and to convert them into callback invocations an event loop is used. So, at I/O calls, node.js can switch from one request to another.

**17) Mention the steps by which you can async in Node.js?**

By following steps you can async Node.js

* First class functions
* Function composition
* Callback Counters
* Event loops

**18) What are the pros and cons of Node.js?**

**Pros:**

* If your application does not have any CPU intensive computation, you can build it in Javascript top to bottom, even down to the database level if you use JSON storage object DB like MongoDB.
* Crawlers receive a full-rendered HTML response, which is far more SEO friendly rather than a single page application or a websockets app run on top of Node.js.

**Cons:**

* Any intensive CPU computation will block node.js responsiveness, so a threaded platform is a better approach.
* Using relational database with Node.js is considered less favourable.

**19) How Node.js overcomes the problem of blocking of I/O operations?**

Node.js solves this problem by putting the event based model at its core, using an event loop instead of threads.

**20) What is the difference between Node.js vs Ajax?**

The difference between Node.js and Ajax is that, Ajax (short for Asynchronous Javascript and XML) is a client side technology, often used for updating the contents of the page without refreshing it. While,Node.js is Server Side Javascript, used for developing server software. Node.js does not execute in the browser but by the server.

**21) What are the Challenges with Node.js ?**

Emphasizing on the technical side, it’s a bit of challenge in Node.js to have one process with one thread to scale up on multi core server.

**22) What does it mean “non-blocking” in node.js?**

In node.js “non-blocking” means that its IO is non-blocking. Node uses “libuv” to handle its IO in a platform-agnostic way. On windows, it uses completion ports for unix it uses epoll or kqueue etc. So, it makes a non-blocking request and upon a request, it queues it within the event loop which call the JavaScript ‘callback’ on the main JavaScript thread.

**23) What is the command that is used in node.js to import external libraries?**

Command “require” is used for importing external libraries, for example, “var http=require (“http”)”. This will load the http library and the single exported object through the http variable.

**24) Mention the framework most commonly used in node.js?**

“Express” is the most common framework used in node.js.

**25) What is ‘Callback’ in node.js?**

Callback function is used in node.js to deal with multiple requests made to the server. Like if you have a large file which is going to take a long time for a server to read and if you don’t want a server to get engage in reading that large file while dealing with other requests, call back function is used. Call back function allows the server to deal with pending request first and call a function when it is finished.