**Week 3**

What is Node Js?

Node Js is a cross-platform, open source server environment that can run on Windows, Linux, Unix, MarcOS, and more.

Node.js is similar in design to, and influenced by, systems like Ruby's Event Machine or Python's Twisted. Node.js takes the event model a bit further. It presents an event loop as a runtime construct instead of as a library. In Node.js there is no such start-the-event-loop call.

HTTP is a first class citizen in Node.Js, designed with streaming and low latency in Mind. This makes Node.js well suited for the foundation of web library or framework. Just because Node.js well is designed without threads, doesn’t mean you cannot take advantage of multiple core in your environment.

Child process can be spawned by using our child\_process.fork () API and are designed to be easy to communicate with. Build upon that same interface is the cluster module, which allows you to share sockets between processes to enable load balancing over your cores.

To initiate Node.js files, use the "Command Line Interface" program on your computer, which depends on your operating system. Windows users can find "Command Prompt" or "cmd" in the search field.

Developers use Node. js to create server-side web applications, and it is perfect for data-intensive applications since it uses an asynchronous, event-driven model.

In a nutshell, Node. js is a popular programming environment that can be used for building high-scale applications that need to support multiple concurrent requests. Single-threaded non-blocking I/O makes it an excellent choice for both real-time and data streaming applications, too.

A package in Node.js contains all the files you need for a module. Modules are JavaScript libraries you can include in your project.

npm stands for Node Package Manager. It's a library and registry for JavaScript software packages. npm also has command-line tools to help you install the different packages and manage their dependencies.28

**Week 4**

React Native (also known as RN) is a popular JavaScript-based mobile app framework that allows you to build natively-rendered mobile apps for iOS and Android. The framework lets you create an application for various platforms by using the same codebase.

Node JS allows you to work with other languages such as ReactNative.

To build the chat app, the following software is required:

* 1. NextJS — A framework for building server-side rendered (SSR) React applications with ease. It handles most of the challenges that come with building SSR React apps.
  2. Pusher — Pusher is a technology for building apps with varying real-time needs like push notifications and pub/sub messaging. It is the engine behind the real-time ability of our comment’s widget.
  3. Sentiment — Sentiment is a module that uses the AFINN-165 wordlist and Emoji Sentiment Ranking to perform sentiment analysis on arbitrary blocks of the input text.
  4. React — A very popular JavaScript DOM rendering framework for building scalable web applications using a component-based architecture.