Windsurf Editor: Complete Guide (original video)

1] Setup Windsurf Editor Project:

• Create a project directory: using "Write with Cascade"

2] Install Node.js:

• Includes npm, the package manager used to install JavaScript libraries like React.

3] Connect to GitHub:

- Initialize a Git repository
- Connect the project to a GitHub repository

4] Install Dependencies:

- Install React for the front end
- Set up Firebase for the backend

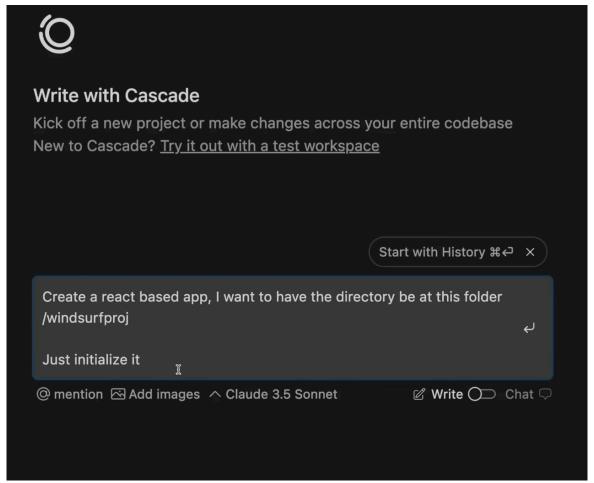
Final Objective: By the end of this lesson, have a Windsurf Editor project set up, connected to GitHub, and configured with React and Firebase.

Additional Note: These directions are meant for complete beginners and will work on Mac, Windows, and Linux.

Need help? Check out <u>bumpups.com</u> — it allows you to use AI to talk to this video, ask for terminal commands, instructions, and more!

1. Create a New Directory and Navigate to It

Mac, Linux, & Windows:



> "/windsurfproj" choose a project name you like such as "/firstApp"

Additional Note: In this step, you are creating a new folder (or directory) on your computer where all your project files will be stored. Navigating to this directory ensures that all subsequent commands and actions take place within this specific project folder. Opening the directory in Windsurf Editor (your code editor) allows you to start coding and managing your project files conveniently from a graphical interface.

2. Install Node.js (Required for React) and Initialize a New React Project

```
Mac:
Install Homebrew (if not installed):
  /bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

Add Homebrew to your PATH:
  (echo; echo 'eval "$(/opt/homebrew/bin/brew shellenv)"') >>
  /Users/YOURNAME/.zprofile
eval "$(/opt/homebrew/bin/brew shellenv)"

Install Node.js using Homebrew:
  brew install node

Initialize React App:
  npx create-react-app .
```

Linux:

Update package list:

sudo apt update

Install Node.js:

sudo apt install nodejs npm

Initialize React App:

npx create-react-app .

Windows:

- Download and Install Node.js from the official website:
 - o Go to https://nodejs.org/ and download the installer.

Open Command Prompt and Initialize React App:

npx create-react-app .

Additional Note: Node.js is a runtime environment that allows you to run JavaScript on your computer outside of a web browser. It's essential for building modern web applications, including React apps. By installing Node.js and using the npx create-react-app command, you are setting up the foundational structure for your React project, enabling you to start developing your web application.

3. Connect to GitHub

Mac:

Install Git using Homebrew:

brew install git

Initialize Git Repository:

git init

Add a README File:

echo "# YOURREPO" >> README.md

git add README.md

git commit -m "first commit"

git branch -M main

Add Remote Repository and Push (Using Personal Access Token):

git remote add origin

https://github.com/YOURUSERNAME/YOURREPO.git

git remote remove origin

git remote add origin

https://YOURUSERNAME:<YOUR_PERSONAL_ACCESS_TOKEN>@github.com/YOU

RUSERNAME/YOURREPO.git

git push -u origin main

Linux:

Install Git:

sudo apt install git

Initialize Git Repository:

git init

```
Add a README File:
```

echo "# YOURREPO" >> README.md

git add README.md

git commit -m "first commit"

git branch -M main

Add Remote Repository and Push (Using Personal Access Token):

git remote add origin

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git remote remove origin

git remote add origin

https://YOURUSERNAME:<YOUR_PERSONAL_ACCESS_TOKEN>@github.com/YOU RUSERNAME/YOURREPO.git

git push -u origin main

Windows:

- Download and Install Git from the official website:
 - o Go to https://git-scm.com/ and download the installer.

Open Command Prompt and Initialize Git Repository:

git init

Add a README File:

echo "# YOURREPO" >> README.md

git add README.md

git commit -m "first commit"

git branch -M main

Add Remote Repository and Push (Using Personal Access Token):

git remote add origin
https://github.com/YOURUSERNAME/YOURREPO.git

git remote remove origin

git remote add origin

https://YOURUSERNAME:<YOUR_PERSONAL_ACCESS_TOKEN>@github.com/YOURUSERNAME/YOURREPO.git

git push -u origin main

Additional Note: This step connects your local project to a remote repository on GitHub, allowing you to back up your code, track changes, and collaborate with others. By initializing Git, you're setting up version control for your project. Pushing your code to GitHub makes it accessible from anywhere and ensures you have a safe backup.

4. Run the React Application

Start the React Development Server:

npm start

• Verify Localhost:

- o Open your browser and navigate to http://localhost:3000.
- You should see the default React welcome screen.

Additional Notes:

- If you're using Windows and encounter any issues, try running your command prompt or terminal as an administrator.
- Ensure that no other processes are using port 3000, or React will prompt you to use a different port.

This step launches your React application locally, allowing you to see and interact with your app in a web browser. Running the development server on your machine provides a preview of how your app will function when it's live, and it automatically refreshes as you make changes to the code.

5. Set Up Firebase

Additional Note: Firebase is a platform by Google that allows you to host your website, store data, and manage user authentication easily.

Install Firebase:

npm install firebase

- Set Up Firebase Project:
 - Go to the <u>Firebase Console</u> and log in.
 - Create a new project by following the prompts.
- Add Firebase to Your Web App:
 - Click on the Web icon (</>) to add Firebase to your web app.
 - Register your app by giving it a nickname (e.g., YOURPROJECT).
 - o Click "Register app" and then "Continue to console."
 - o Copy your Firebase configuration.
- Configure Firebase in Your Project:
 - Create a firebase.js file in the src directory:

For Mac and Linux:

touch src/firebase.js

For Windows:

type NUL > src\firebase.js

- Add Firebase configuration to firebase.js:
 - Open the firebase.js file and add the following code, replacing the placeholder values with your Firebase configuration:

```
// src/firebase.js
```

```
import { initializeApp } from 'firebase/app';
import { getFirestore } from 'firebase/firestore';
```

```
import { getAuth } from 'firebase/auth';
const firebaseConfig = {
  apiKey: "YOUR_API_KEY",
  authDomain: "YOUR_AUTH_DOMAIN",
  projectId: "YOUR_PROJECT_ID",
  storageBucket: "YOUR_STORAGE_BUCKET",
  messagingSenderId: "YOUR_MESSAGING_SENDER_ID",
  appId: "YOUR_APP_ID"
};
const app = initializeApp(firebaseConfig);
const db = getFirestore(app);
const auth = getAuth(app);
export { db, auth };
```

6. Deploy to Firebase Hosting

Install Firebase CLI (if not already installed):

npm install -g firebase-tools

Login to Firebase:

firebase login

Initialize Firebase in Your Project:

firebase init

- Choose "Hosting" from the options.
- Select the project you created in the Firebase Console.
- Set the public directory to build.
- Configure as a single-page app by answering Yes to the relevant prompt.
- Do not overwrite index.html.

Build Your React App:

npm run build

Deploy Your App to Firebase Hosting:

firebase deploy

Additional Note: In this step, you're preparing your React app to go live on the internet. First, you install the Firebase CLI to interact with Firebase from your terminal. Then, you log in and set up Firebase Hosting for your project. After building your React app for production, you deploy it to Firebase Hosting, making it accessible via a live URL.

7. Verify Firebase Hosting

• Open your deployed site URL (provided after deployment) to ensure it displays correctly.

Recap of the Lesson:

- Created a new project directory and initialized a React app.
- Connected the project to a GitHub repository using a personal access token for authentication.
- Verified the React app runs on localhost.
- Set up Firebase, installed necessary dependencies, and configured Firebase in the project.
- Built the React app and deployed it to Firebase Hosting, ensuring everything is correctly set up.

By following these steps, you have successfully set up a React project with Firebase and connected it to GitHub, ready for further development.

BOOM - you are done! >> 1

Wanna see more?

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