



bootcamp-2020

Bootcamp 2020: Free Online Learn to Earn Fasttrack Bootcamp to Learn Freelancing and do Remote Work in the COVID-19 Economic Environment

We will teach you online to Build Full Stack Mobile Web Apps including e-commerce apps using React, Gatsby.js, Redux, QraphQL, Node.js/Express, MongoDB, Git, GitHub, GitHub Actions, Terraform, Google Cloud Run, AWS EC2, Contentful, Stripe, SnipCart, Shopify, etc. and to sell your services on Upwork and Fiverr.

We have to understand humanity is facing a COVID-19 induced global economic recession and only the high-tech and software companies have grown and their stock prices and business have risen in this environment. We need to immediately get ready to face the upcoming economic crises boldly.

English Section:

Every Tuesday at 10:00 PM – 11:15 PM Pakistan Standard Time

Every Saturday at 10:00 PM – 11:15 PM Pakistan Standard Time

[English broadcast live on Facebook](#)

[YouTube English Channel](#)

Urdu Section:

Every Wednesday 10:00 pm to 11:15 pm Pakistan Standard Time

Every Sunday 10:00 pm to 11:15 pm Pakistan Standard Time

[Urdu broadcast live on Facebook](#)

[YouTube Urdu Channel](#)

Teaching Team:

[Zeeshan Hanif](#), Hira Khan, Bashir Aziz, Daniyal Nogori, [Moshin Khalid](#), Aamir Pinger, Adil Altaf, Ameen Alam and [Zia Khan](#).

Prerequisites: HTML, CSS, and JavaScript

These topics have been released for everyone in Urdu:

[Learn HTML by Hira Khan](#)

[Learn CSS Intro by Hira Khan](#)

[Learn JavaScript by Zeeshan Hanif](#)

Note: Material in English is already available [extensively on the web](#).

Class 1:

Learning Material for Class 1:

[Assignment Notes](#)

[Presentation](#)

[Notes](#)

[Class 1 in English on Facebook](#)

[Class 1 in English on YouTube](#)

[Class 1 in Urdu on Facebook](#)

[Class 1 in Urdu on YouTube](#)

Class 2:

Learning material

[Assignment](#)

[Notes](#)

English Videos:

[Class 2 in English on Facebook](#)

[Class 2 in English on YouTube](#)

[Class 2 in Urdu on Facebook](#)

[Class 2 in Urdu on YouTube](#)

Class 3 and 4

[Learn React](#) [Learn React Tutorial](#) Cover the Tutorial Before Fetching Data

[Class 3 Facebook English Video](#)

[Class 3 YouTube English Video](#)

[Class 3 Facebook Urdu Video](#)

[Class 3 YouTube Urdu Video](#)

[Class 4 Facebook English Video](#)

[Class 4 YouTube English Video](#)

[Class 4 Facebook Urdu Video](#)

[Class 4 YouTube Urdu Video](#)

Bootcamp 2020 Project 1: Build an Expense Tracker App using React

Hooks and Context API

Class 5 and 6

After we have learned the useState Hook in class 4 using the [Learn React Tutorial](#) we will skip the fetch data (we will cover it latter) part of the tutorial and learn useContext and useReducer hooks and build the Expense Tracker App.

First we will learn the hooks:

[An Introduction To React's Context API](#)

[Working with the React Context API](#)

[How to use the useReducer React hook](#)

[Understanding the React useReducer Hook](#)

[Class 5 YouTube English Video](#)

[Class 5 Facebook English Video](#)

[Class 5 YouTube Urdu Video](#)

[Class 5 Facebook Urdu Video](#)

The we will build the Expense Tracker App:

Follow this Video and build the App: [Expense Tracker](#)

Project Due Date: Monday, June 22, 2020 Midnight Pakistan Standard Time

[Project Submit Form](#)

[Class 6 YouTube English Video](#)

[Class 6 Facebook English Video](#)

[Class 6 Facebook Urdu Video](#)

[Class 6 YouTube Urdu Video](#)

[Expense Tracker App By Adil Altaf](#)

[Git Repo URL](#)

[Surge URL](#)

[Step by Step Guide](#)

Class 7 and 8

[JavaScript Promises, Callbacks, and Async/Await for Beginners](#)

[Asynchronous JavaScript: How Callbacks, Promises, and Async-Await Work](#)

[Code for Class 7 English](#)

[Class 7 English Facebook Video](#)

[Class 7 English YouTube Video](#)

[Class 7 Urdu YouTube Video](#)

[Class 7 Urdu Facebook Video](#)

[Learn JavaScript Fetch](#) [How to fetch data in JavaScript](#)

[Fetch API data using useEffect React hook](#)

[Different Options to get data in React](#) [Different ways to fetch data in React](#)

[Class 8 Code](#) [Class 8 English Facebook Video](#) [Class 8 English YouTube Video](#) [Class 8 Urdu Facebook Video](#) [Class 8 Urdu YouTube Video](#)

[Data fetching with React Suspense](#) [React Suspense 1](#) [React Suspense 2](#) [React Suspense 3](#) [React Suspense 4](#) [References: React Suspense Reference 1](#) [React Suspense Reference 2](#)

Class 9

[Learn Material UI](#) [Main Website Installation](#) [Getting Started](#) [Details](#) [Templates](#)

[Learn Chart.js](#) [Mian Docs](#) [Getting Started](#)

[Class 9 English Facebook Video](#)

[Class 9 English YouTube Video](#)

[Class 9 Urdu Facebook Video](#)

[Class 9 Urdu YouTube Video](#)

Bootcamp 2020 Project 2: COVID-19 Tracker App

[Submit Project here](#)

Last date for Submitting Project 2: COVID-19 Tracker App is Friday, July 10 midnight

You will use React, React Material UI, Chart.js, and React Suspense to build this COVID-19 Tracker React App

1. Watch this video as a example for the app but build your own app don't just copy it: [Example COVID-19 Tracker App Demo](#)
2. Choose one or more COVID-19 API's that you are going to use: [COVID-19 API Listing 1](#) [COVID-19 API Listing 2](#) [COVID-19 API Listing 3](#) [COVID-19 Google Map API](#)
3. Start building your COVID-19 Tracker App

Your code should be hosted in a GitHub Repo from the beginning with GitHub CI/CD Actions and hosted on Surge.

Class 10

Adil Altaf builds the COVID-19 Tracker App [Class 10 English Facebook Video](#)

[Class 10 English YouTube Video](#)

[Class 10 Urdu Facebook Video](#)

[Class 10 Urdu YouTube Video](#)

Class 11 React Router v6

[Setting Started with React Router V6](#)

[React Router v6 Video Tutorial](#)

Note: Use the latest Beta Release of V6

[Class 11 English Facebook Video](#)

[Class 11 English YouTube Video](#)

Bootcamp 2020 Project 3: Shoe Store

Now build a Shoe Store after watching this [video](#)

Last date to [submit Project 3](#) is Wednesday, July 15 midnight

Class 11 and 12 Web Animations API

Videos Not Available Yet!

[Web Animations API Now Supported in All Evergreen Browsers](#)

[Check Browser Support](#)

[Web Animations API Concepts](#)

[We will use this Shim](#)

We will learn from this Tutorial in depth

[Using the Web Animations API](#)

[Additive Animation with the Web Animations API](#)

[Examples](#)

[Live Demos](#)

[More Web Animations Resources](#)

Using Web Animation API with React

We will be using the following React hooks `useEffect`, `useLayoutEffect` and `useRef`.

[Everything You Need to Know About FLIP Animations in React](#)

[Creating Highly-Performant Animations using Web Animations API and React hooks](#)

Bootcamp 2020 Project 4A: Red Queen's Race with Web Animation API and React Hooks

Review the [code and demo](#) and improve and build your own Red Queens Race Animation with React Hooks.

Note the following:

1. When Alice drinks from the bottle, she grows smaller.
2. Because small children tire out easily, unlike automaton chess pieces, Alice is constantly slowing down.
3. But urging them on by clicking or tapping causes them to speed up.
4. The background elements also have playback rates that are impacted when you click or tap.

[Source Article](#)

Bootcamp 2020 Project 4B: Develop Tiny Short Animation with React Hooks

Read this article: [The Tiny Short Animation Trend in Web Design](#)

Clone the front page animation of one of the companies mentioned in the article, using the latest web animation API.

Bootcamp 2020 Project 5: Build a Animated React Website which follows the Latest Trends like Animated Illustrations

"Our eyes are hardwired to notice movement. Historically, it's helped to keep us alive. And, in 2020, web designers are capitalizing on this default human setting. Animated illustrations are one of the newest trends being used to direct viewer attention within web designs. You'll see these petite animations on sites all over the web. Some animated illustrations are merely still graphics that jiggle, while other illustrated animations are more thoughtful and complex. When used to their fullest capacity, animated illustrations can tell stories, explain concepts, or help viewers navigate a website." [The 8 Biggest Web Design Trends of 2020](#)

[20 Extraordinary Web Design Ideas That Will Get Everyone Clicking](#) Incorporating illustration on a website has been a trend for a few years. However, designers are now focusing to create custom and 3D illustrations to define a brand. An illustration can empower a brand if blended well with minimalism. See how the brand Neat has rightly executed this trend:

[Neat Website](#)

To intrigue viewers, brands like Pitch have introduced 3D illustration design: [Pitch Website](#)

In this project you will build a animated React Website, all animations must use the latest Web Animations API and latest trends.

Resources:

[Beautiful, free illustrations](#)

[free illustrations](#)

[Design Resources for Developers](#)

You can use the ideas form these resources or develop your own ideas:

[Best websites that use Illustration and Animation](#)

[22 Websites with Impressive Illustrations and Animations](#)

[10 Inspiring Websites with Gorgeous Animations](#)

[Animated Sites](#)

[8 Best Animated Websites](#)

[Best Website examples of designs with animation](#)

You may use AI to generate graphics:

[Creative Tools to Generate AI Art](#)

[Magenta.js](#)

[Web Demo](#)

[Magenta Tool](#)

[Sketch-RNN-JS: A Generative Model for Vector Drawings](#)

[Auto Draw: An AI Experiment](#)

Bootcamp 2020 Project 6: Shopping Cart with Context API, React

Hooks, Animations API, and Router

1. Building a CRUD App with React Hooks & the Context API
2. Review Shopping Cart Demo [Demo](#) [Explanation](#) [Video](#) [Code](#) [Another Example](#) [Yet Another Example](#)
3. Now build your own Professional Shopping Cart with Context API, Hooks, Animation API and Router

Bootcamp 2020 Project 7: Shopping Cart with Redux Toolkit, Animations API, and Router

1. Learn Redux Toolkit [Basic Tutorial](#)
2. Build your Shopping Cart with Redux Toolkit [Create a shopping basket using React and Redux Toolkit](#)

Bootcamp 2020 Project 8: Make your Expense Tracker App and COVID-19 Tracker App into a Progressive Web App (PWA) that uses TypeScript

[TypeScript in 5 minutes](#)

[TypeScript Tutorial: A step-by-step guide to learn TypeScript](#)

[React TypeScript: Basics and Best Practices](#)

[TypeScript tutorial in Visual Studio Code](#)

[Getting started with React and TypeScript](#)

[What's a PWA, and How Do I Build One?](#)

[How to Make your React App a Progressive Web App \(PWA\)](#)

[Google Play Store now open for Progressive Web Apps](#)

[How to publish PWA app on Google Play Store – Step by step guide](#)

[How Progressive Web Apps Will Change Mobile Commerce In 2020](#)

[Make your PWA feel more like an app](#)

[Latest News](#)

[PWA Reference](#)

Bootcamp 2020 Project 9: E-Commerce App using Gatsby.js, GraphQL, Contentful, Stripe and SnipCart

1. Learn Gatsby.js [Gatsby Tutorials](#)
2. Learn Contentful [Getting Started](#)
3. Gatsby Ecommerce [Gatsby Ecommerce Tutorial](#)
4. Learn to build ecommerce website [Building an ecommerce site with Gatsby, Contentful and Snipcart](#)
5. Build your own Ecommerce Website using Shopify and Gatsby

[Shopify vs Amazon](#)

[Ecommerce is fragmenting. Shopify may be the glue that holds it together](#)

[Shopify Tutorial: A Detailed Step-by-Step Guide for Beginners](#)

[How to Set up Your Own Online Shop with the Help of Shopify](#)

[Building an E-commerce site with Shopify](<https://www.gatsbyjs.org/docs/building-an-e-commerce-site-with-shopify/>)

1. International Ecommerce Services [Options to build a ecommerce site](#)

2. Pakistani Payment Services [Ecommerce in Pakistan Alipay in Pakistan JazzCash JazzCash](#)

[Documentation](#) [JazzCash Developer Certe](#) [Payment Gateway](#) [Online Payment Gateway](#) [Telenor](#)

[Opens API Integration Guide](#)

Bootcamp 2020 Project 10 Build a Facebook Shop

[The end of eCommerce as we know it](<https://marketing-interactive.com/opinion-the-end-of-e-commerce-as-we-know-it>)

[Facebook Shops: What Shops could spell for the future of social commerce](#)

[Introducing Facebook Shops, a new online shopping experience](#)

[Introducing Facebook Shops: Helping Small Businesses Sell Online](#)

[Facebook Shop a No Brainer for Advertisers, Says 5-Star Analyst](#)

[Complete Details about Facebook Shops](#)

[About Facebook Shops](#)

[Facebook Developer Platform](#)

[Getting Started](#)

[Reference Reading](#)

Bootcamp 2020 Project 11: Learn Multicloud Serverless Application Development

[Servlesss and Cloud Native Computing Overview in Urdu on YouTube](#)

[Servlesss and Cloud Native Computing Overview in Urdu on Facebook](#)

1. Build a Expense Tracker Backend using Node.js & Express API

2. What are Microservices?

[Microservices 101](#)

1. How to make Repos for Microservices

[How to end Microservice pain and embrace the Monorepo](#)

1. Learn Multicloud Serverless Application Development

[Multicloud Serverless App Development Overview in Urdu on Facebook](#)

[Multicloud Serverless App Development Overview in Urdu on YouTube](#)

Bootcamp 2020 Project 11A: Implement Expense Tracker Android and iOS Apps using React Native with Backend in Express and MongoDB

[React Native Basics](#)

Bootcamp 2020 Project 11B: Implement Expense Tracker Android and iOS Apps using React Native with Local Storage in Realm

[Realm Docs](#)

Bootcamp 2020 Project 12: Implement Expense Tracker DApp with Ethereum Blockchain

[What are Decentralized Applications – dApps?](#)

Zeeshan Hanif has implemented Expense Tracker as a DApp:

[Demo](#)

You need to have [MetaMask installed](#) to test the DApp

Test it on ropsten network otherwise it will cost you real Ether

[Review Zeeshan Hanif's Code](#)

React is used to develop the Dapp, createContext and useReducer Hooks are used for state management

Smart Contract is written in [Solidity](#)

[Web3.js](#) is used to integrate with the Blockchain Node

You are required to develop your own version of Expense Tracker DApp

Bootcamp 2020 Final Project 13: Participate in Building a Open Source Ecommerce Framework using TypeScript, Gatsby.js, Node.js/Express, Atlas MongoDB, Google Cloud Run, and Terraform

First Season consisting of 12 Episodes of Tech Talk in Urdu with Zia Khan and Adil Altaf are now available. In these episodes we discuss latest state of the art technologies like AI, Cloud Native, Serverless, Blockchain, JAMstack, and Multicloud.

[Enjoy Watching on YouTube](#)

More Details will added as we go forward.

Get AWS and Google Cloud Accounts for Bootcamp 2020

The software industry has completely shifted toward multi-cloud usage in projects. In our bootcamp we will be using Amazon and Google clouds extensively. It is requested from all participants that they make arrangements to get the following free AWS and Google accounts within one month:

[AWS Free Offer](#)

[Google Cloud Free Offer](#)

You will get temporary free Access to Google Cloud while doing these [Hello Cloud Run tutorial](#) and [Build a Resilient, Asynchronous System with Cloud Run and Pub/Sub tutorial](#).

You will get temporary free Access to AWS while doing these [Introduction to AWS Lambda tutorial](#) and [Building Serverless Applications with an Event-Driven Architecture](#)

Note 1: It is very easy the difficult part is getting your account verified by using credit cards or bank accounts.

Note 2: The cloud accounts are not required immediately. We will need them in about a months

time.

Bootcamp 2020 Ninja Team Selection

I will be selecting the best of the best developers from the bootcampers to work closely me and our team. First they will help the students and later they will be doing freelancing with our team. The criteria for selection will be the submitted projects, professionalism and project ownership. Even once selected you can be removed from the team because you did not follow instructions, or your performance is not up to mark. Only one warning will be given before removal.

Right now I have selected only nine developer:

1. Jassel Mehmood, Karachi
2. Farhan Farooq, Karachi
3. Abdul Raffay Rizwan, Karachi
4. Nadir Ali, Karachi
5. Maleeha Khalid, Lahore
6. Muhammad Usman Tariq, Karachi
7. Muhammad Bilal, Rawalpindi
8. Muhammad Usman, Wah Cantt
9. Saad Baig, Karachi

Muhammad Naeem Akhtar from Turin, Italy and Nadir Ali from Karachi have jointly won Chief Ninja position in Bootcamp 2020 I am extremely pleased to announce that Muhammad Naeem Akhtar (<https://www.facebook.com/profile.php?id=100014148211403>) and Nadir Ali (<https://www.facebook.com/nadirali.abro.58/>) have won the Chief Ninja position by submitting the following two React apps:

Naeem Project 1: Expense Tracker <http://expense-tracker-app-mna.surge.sh/>

Naeem Project 2: COVID-19 Tracker <http://covid19-analytics-mna.surge.sh/>

Nadir Project 1: Expense Tracker <http://bootcamp2020-expense-trackerapp.surge.sh/>

Nadir Project 2: COVID-19 Tracker <http://bootcamp2020-covid19-trackerapp.surge.sh/>

Naeem will be the Chief Ninja for the English Section: <https://www.facebook.com/groups/4IRUG/>

Nadir will be the Chief Ninja for the Urdu Section:

<https://www.facebook.com/groups/freelance.remote.work/>

Both will also be joining the live classes representing the students.

Interesting info about Naeem: Right now he is living in Turin, Italy. He has done Bachelor in Electronic Engineering and Master in Mechatronic Engineering from Italy. Right now he is doing a full time job as Junior Java and IoT developer.

Note for everyone: All positions are temporary, as we move forward anyone can replace anyone, everything is purely merit based.

Please note if I am leading a team two things are not tolerated under any circumstances: telling an untruth and unprofessional behavior. I do not care if you are not super-intelligent but what we are looking for are people who take ownership and are highly ethical and professional.