Intro to Authentication Systems: Hackpack

September 14, 2021 / 9:00 PM - 10:30 PM ET

Description

What do some of the largest companies and emerging startups do to build extremely secure platforms for their users? How do they structure their authentication systems to provide a seamless experience for users and a strong barrier against hackers? These are the topics we'll be covering in this workshop - minimal experience required!

Learning Outcomes

This is what you will gain from the workshop and why it's valuable to you.

- Deepen your knowledge of APIs and how to properly secure them by building a fully functional Authentication System
- Understand the basics of Cybersecurity, including Hashing and Salting
- Be ready to work with one of the most popular authentication systems (JWT) used by companies like Google and Spotify

Prerequisite Knowledge

In order to get the most out of this workshop you should be comfortable with the following concepts:

- Basic Node.js Knowledge
- Basic HTML, CSS Knowledge
- Basic Express.js Knowledge

Pre-Workshop Checklist

Before the workshop, please make sure you complete the following items:

- Please make sure to have Node.js and npm installed and updated.
- Clone the template project from this github repository.

Timeline (1.5 hours)

Time	Module	Description
20 min	Understanding the Problems	We'll answer: Why do we need authentication systems? What real problem do they solve?
20 min	Developing a Possible Solution	We'll be exploring solutions to the problems and comparing JWT with Session Cookies.
40 min	Implementing our solutions	We'll finally get to the programming portion of the workshop and implement our authentication system.
10 min	The Future of Authentication	We'll wrap everything up by discussing why an authentication system is just not enough and how user experience and expectations are impacted by auth systems.

Workshop Lead Contact

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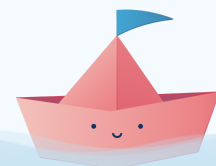
Additional Resources

Hack the North Resources

Hack the North 2021 Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Workshop-Specific Resources

An In-Depth Guide to Hashing and Salting

A comprehensive introduction to why hashing and salting is important and exactly how to do it.

Hasura's Recommended Implementation of JWT

A highly detailed guide on storing and implementing JWT and handling certain user actions and how they correspond to authentication systems.

General Resources

Intro to Node.js

A thorough introduction or refresher on the Node.js JavaScript runtime. Feel free to use this to quickly prepare for the workshop.

Introduction to Express

A very quick introduction in the basics of the Express library and web servers in general.