

# JI HO OH

2A HONOURS MATHEMATICS

✉ jh8oh@edu.uwaterloo.ca ☎ (226) 978 3297 🌐 jh8oh

## SKILLS

**PROGRAMMING:** Java, Kotlin, Swift, Python

**WEB DEVELOPMENT:** HTML, CSS, JavaScript, Vue.js, SCSS

**TECHNOLOGIES:** Android API, Git, WordPress REST API

## EMPLOYMENT

### Web and Mobile App Developer

Jan. 2020 - Apr. 2020

DC Canada Education Publishing, Ottawa, ON

**Website development:** Maintaining and developing new content/features on a WordPress powered website. Integrated MotionPay (AliPay and WeChat Pay) into the payment system for the Chinese domain. Used **PHP** to send order details to MotionPay's API which generated a QR code to display. Used **WordPress REST API** to add the product into the user's account once the QR code had been scanned.

**Mobile app development:** Solo development on an Android mobile app that is used to support an online e-book reading platform titled One Story a Day (see below).

## PROJECTS

### Course Grade Calculator

May 2019 - Sep. 2019

Android app that tracks grades for school courses. Uses Android dependencies, such as:

- **Room** which allows for data to be saved in a local database and provides a layer of abstraction over SQLite. Used due to its ease of use when storing data.
- **LifeCycle** which ties data received from the repository to the lifecycle of a view, such as an activity or a fragment. Used to tie changes in the database to changes in the shown view.
- **Coroutines** which allows for asynchronous and concurrent programming (similar to threads). Used to keep long operations, such as getting data, off the main thread to avoid delays when showing views.

### One Story a Day

Feb. 2020 - Apr. 2020

Android app that replicates "One Story a Day", a children's book website.

- Communicates with the website's **REST API** to handle account details such as username, email, and password.
- Used **JWT authentication** to log the user in. Done by either validating the user credentials (username and password) or by verifying a stored **JSON token** which was received from logging in previously.
- Created and handled an **SQLite database** that managed the relationship between programs and books; some books contained books themselves.
- Used a web view to display web pages that contained an embedded online reader. The app also had to send the **JSON token** which allowed the reader to be displayed in order to prevent people from reading it without payment.

### Personal Website

Mar. 2020 - Current

A personal website to advertise myself and to start getting into modern web development past the standard HTML, CSS, and JavaScript.

- Uses **Vue.JS** as a framework. It's a single page application that uses **Vue Router** to "simulate" different pages.
- Uses **SCSS**, a CSS preprocessor

## EDUCATION

### University of Waterloo

Sep. 2018 - Current

Bachelor of Maths Mathematics 2023

Received the President's Scholarship of Distinction, an entrance scholarship for an admission average of 95% or higher

### British International School Vietnam

Sep. 2003 - May 2018

IB Diploma 2018

IB score of 41/45 (Top 5% in world)

Took part in the UKMT Senior Mathematical Challenge and received the gold award (83+ points)