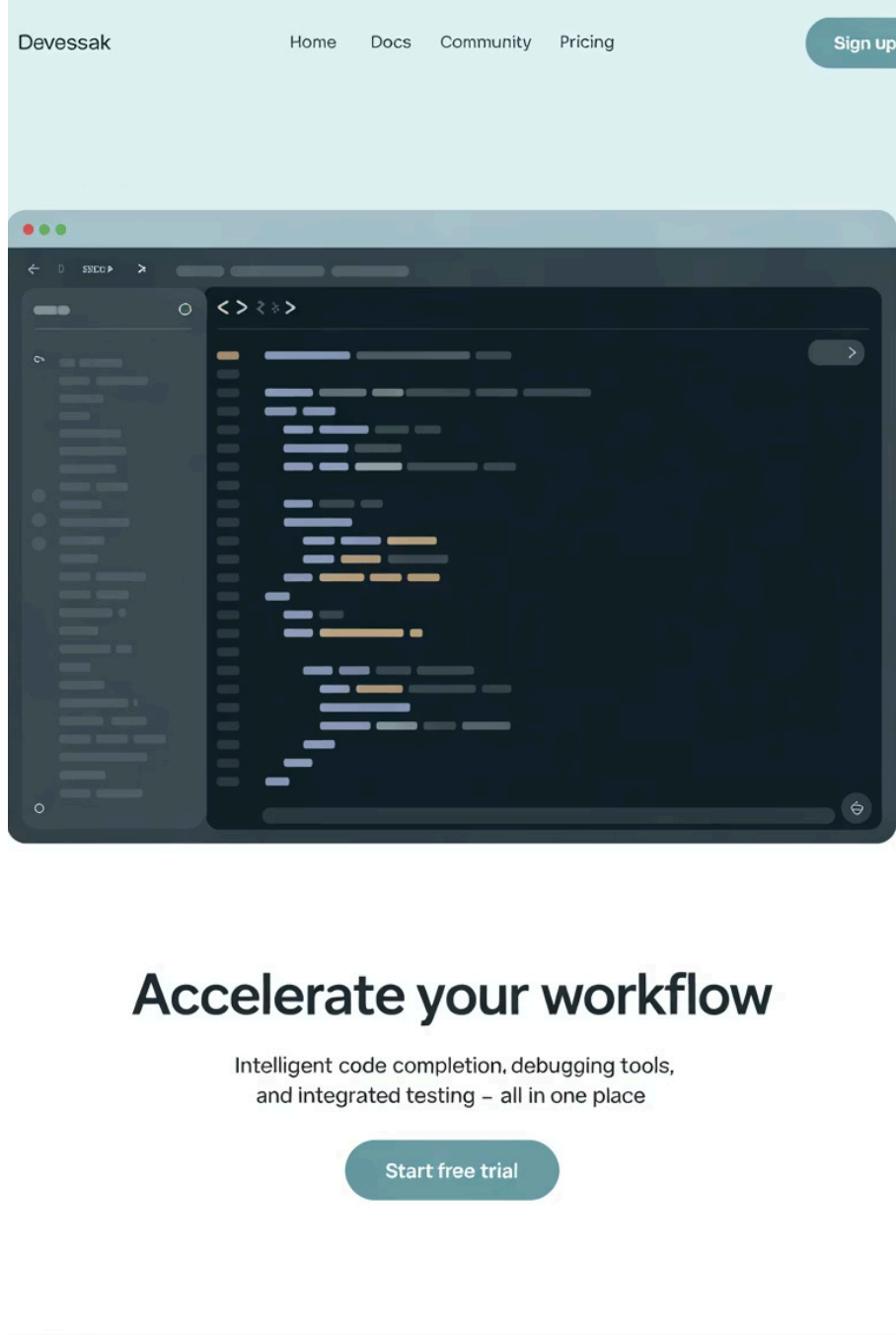
# JavaScript: Getting Started

JavaScript is the programming language of the web, evolving from simple website functionality to a powerful tool for creating complex applications across multiple platforms.

In this course, I'll teach you the very basics of how to develop software using JavaScript, helping you build a foundation for creating everything from web applications to mobile apps and desktop software.

**by Naresh Chaurasia**



# The Evolution of JavaScript

1

## Early Days

JavaScript started as a way to add small bits of functionality to websites, providing simple interactivity to static web pages.

2

## Web Revolution

Evolved to support the creation of complex business applications on the web with built-in connectivity for utilities, security, and data applications.

3

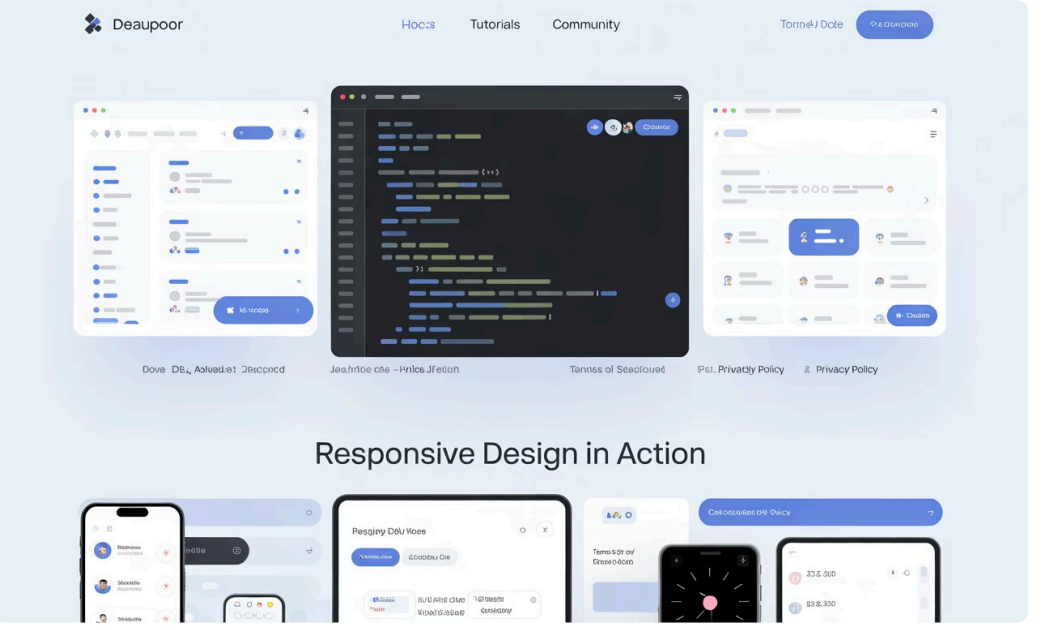
## Modern Era

Now used across multiple platforms including web browsers, mobile devices, desktop applications, and server-side development.

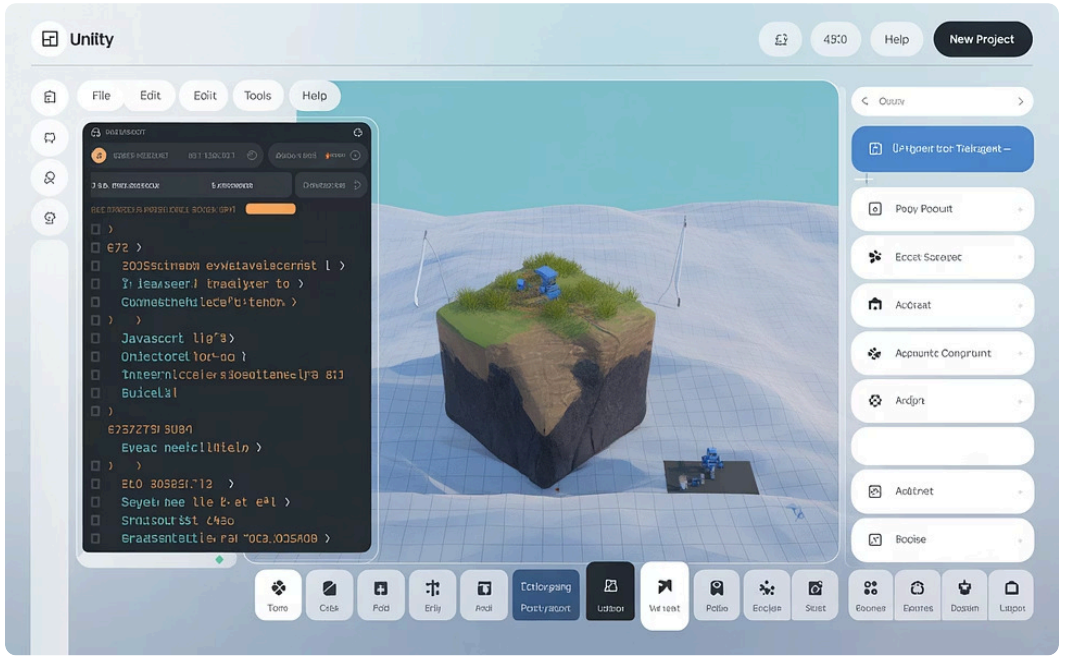
# Web Development Foundation

JavaScript is the programming language of the web, supported by every major browser including Chrome, Firefox, Safari, and Edge. It's used on the vast majority of websites worldwide, making it an essential skill for web developers.

With web connectivity built in, JavaScript enables developers to create almost any kind of utility, security, or data application. The language has evolved significantly to support the creation of sophisticated business applications that run directly in the browser.

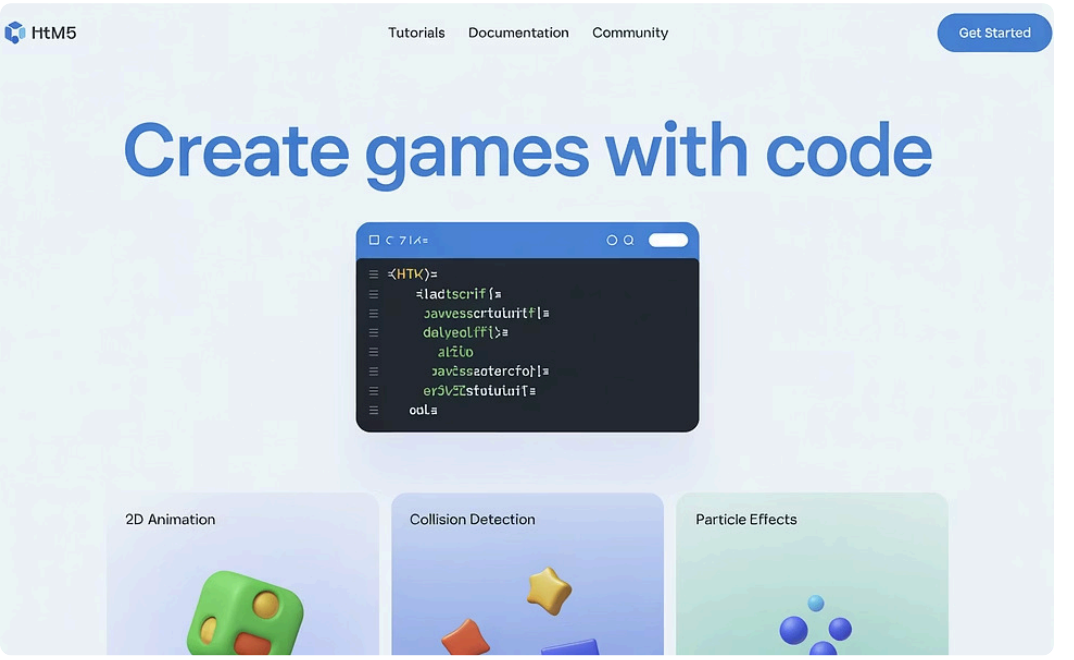


# Game Development with JavaScript




## Unity Integration

JavaScript is supported as a programming language for Unity, a popular engine for creating both 2D and 3D games across multiple platforms.

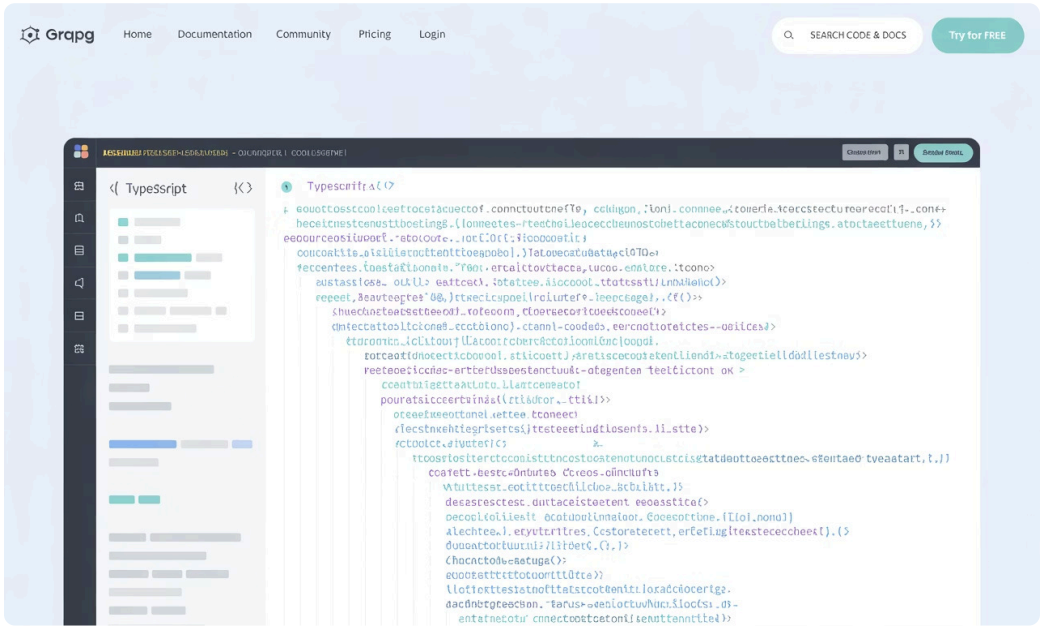



## Web-Based Games

Developers can create browser-based games using JavaScript with HTML5 Canvas and WebGL technologies.

Game development with JavaScript has become increasingly popular, allowing developers to create everything from simple casual games to complex 3D experiences that run across multiple platforms.

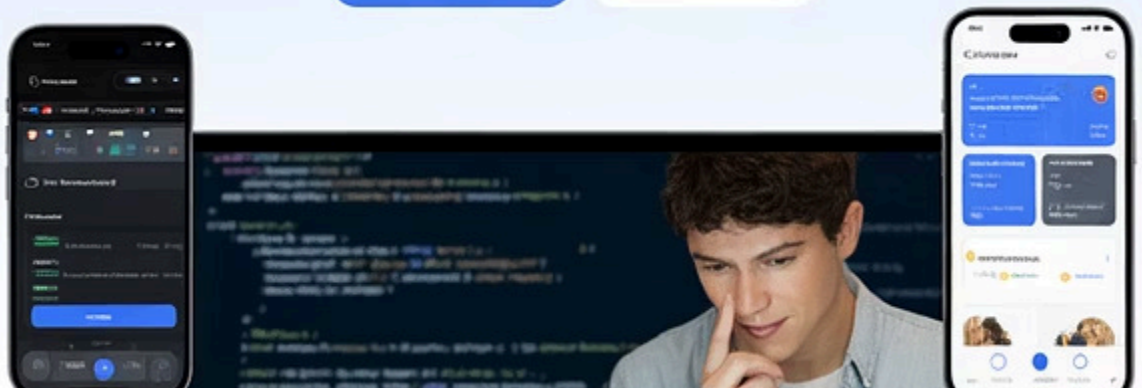
# Enterprise Applications with TypeScript




## TypeScript: JavaScript's Powerful Extension

For large business applications, JavaScript has been embraced by TypeScript, a scalable language developed by Microsoft. TypeScript is a superset of JavaScript, adding static typing and other features that make it ideal for enterprise-level development.

Understanding JavaScript thoroughly is essential for working with TypeScript, as all TypeScript code compiles down to JavaScript. This makes JavaScript knowledge fundamental for writing large-scale business applications and other software using TypeScript.



# Mobile App Development

## 1 Native Mobile Applications

JavaScript enables developers to create native applications for smartphones and tablets, providing a way to build cross-platform mobile apps with a single codebase.

## 2 Apache Cordova

A popular technology for mobile development with JavaScript is Apache Cordova, which allows web applications to be packaged as native apps with access to device features.

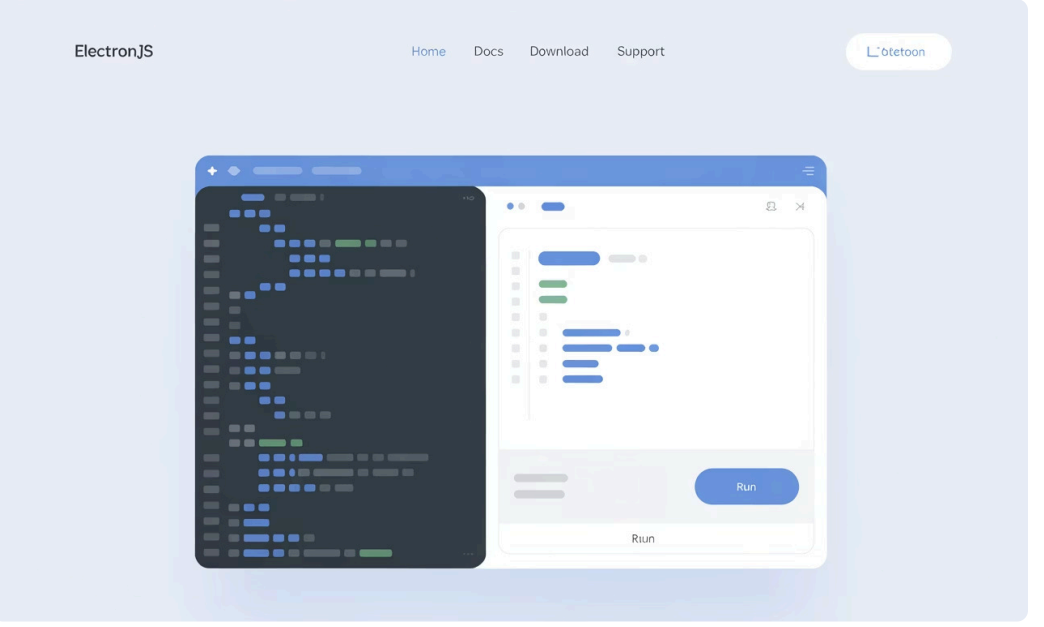
## 3 React Native & Other Frameworks

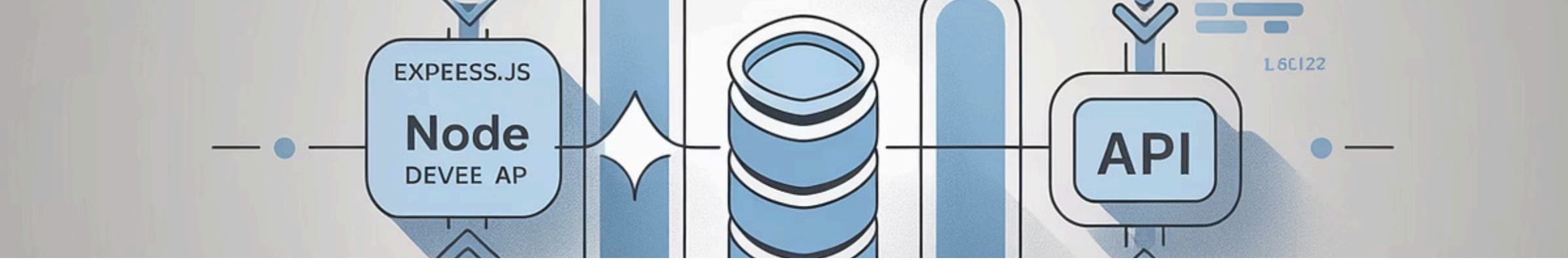
Modern frameworks like React Native extend JavaScript capabilities, allowing developers to create truly native mobile experiences with JavaScript syntax.

# Desktop Application Development

JavaScript isn't limited to web browsers - it can create full-fledged applications for Mac and Windows desktops without requiring a browser at all. This capability has transformed JavaScript from a web-only language to a comprehensive solution for desktop software development.

A popular technology to accomplish this is Electron, which combines Chromium and Node.js into a single runtime. Many popular desktop applications like Visual Studio Code, Slack, and Discord are built using Electron and JavaScript.






# Server-Side Development with Node.js

## Web Servers

Node.js allows JavaScript to run on servers, enabling developers to create high-performance web servers that can handle numerous concurrent connections efficiently.

## Web APIs

Create RESTful APIs and microservices using JavaScript on the server side, providing data and functionality to web and mobile applications.

## Backend Services

Develop complete backend systems including database interactions, authentication services, and real-time communication using JavaScript.

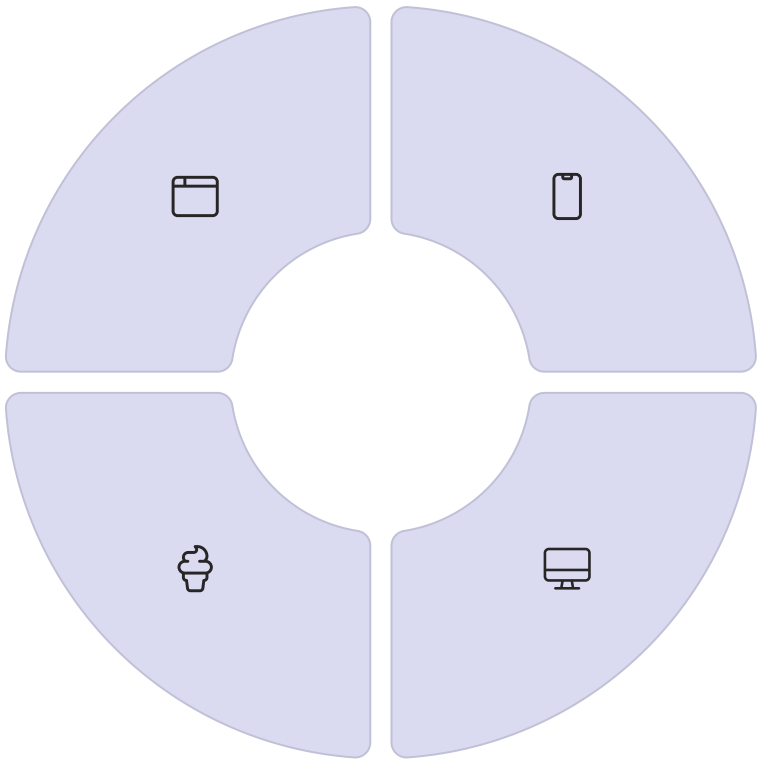
# JavaScript as a Multi-Platform Language

### Web Browsers

Runs in any modern web browser including Chrome, Firefox, Safari, and Edge, powering interactive websites and web applications.

### Servers

Runs on any back-end server using Node.js to create web servers, APIs, and other backend services.



### Mobile Devices

Creates native applications for smartphones and tablets using technologies like Apache Cordova and React Native.

### Desktop Computers

Builds desktop software for Mac and Windows using Electron and similar frameworks without requiring a browser.