**Mobile app (IOS, Android):**

**Technologies:**

* Mobile app prototype - demonstrates how a product will function. The purpose of a prototype is to communicate a product’s design and navigation flow to maximize the efficiency of development.
* IDE - an integrated development environment is a software application that provides comprehensive facilities to computer programmers for software development.
* Coding language – development programming language.

**Mobile app prototype:**

Mobile App Prototyping Tool – Sketch. Sketch is a lightweight tool with a simple interface, leaving designers free to focus on the task at hand. It enables the user to transition seamlessly between design screens (artboards), add animations, and create working prototypes with a couple of clicks.

$99 for full version

**Android app:**

IDE - Android Studio. Android Studio is an Android development Software built by Google. Its implementation editor is very useful for Android developers. Android studio provides shortcuts for coding and designing and its layout designer makes it very easy to use, which helps reduce time spent on coding. Android studio also provides drag and drop features to design the layout of your projects. It is a free software.

Language – Java/Kotlin.

For play market publication need a Google Play Developer Account - $25 (pay the one-time)

**IOS app:**

IDE – Xcode. Xcode is one of the best IDE for iOS app development that features automatic completions and full syntax highlighting for Swift. It is integrated with the Cocoa Touch frameworks. It has an assistant button which splits the editors into primary work document & the assistant editor.

Language – Swift.

For Appstore publication need an Apple Developer Account - $99 (annual fee)

Another important step is to buy **GitHub private account** - $9 per month

**Backend:**

**Technologies:**

* Coding language - development programming language.
* A database - is an organized collection of data, generally stored and accessed electronically from a computer system. Where databases are more complex they are often developed using formal design and modeling techniques.
* Frameworks – is a software library that provides a fundamental structure to support the development of applications for a specific environment.
* Cloud hosting - is the process of outsourcing an organization's computing and storage resources to a service provider that offers its infrastructure services in a utility model.

**Coding language:**

Python - is an interpreted, high-level, general-purpose programming language. The main language of AI and ML. With its strong process integration features, unit testing framework and enhanced control capabilities contribute towards the increased speed for most applications and productivity of applications. It is a great option for building scalable multi-protocol network applications.

**Database:**

Apache CouchDB - is an open source NoSQL document database that collects and stores data in JSON-based document formats. Unlike relational databases, CouchDB uses a schema-free data model, which simplifies record management across various computing devices, mobile phones, and web browsers.

**Framework:**

Django - is a powerful and flexible toolkit for building Mobile App.

TensorFlow - is a free and open-source software library for dataflow and differentiable programming across a range of tasks. It is a symbolic math library, and is also used for machine learning applications such as neural networks. It is used for both research and production at Google.‍

**Cloud hosting:**

Google Cloud - is a provider of computing resources for deploying and operating applications on the web. Its specialty is providing a place for individuals and enterprises to build and run software, and it uses the web to connect to the users of that software.

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