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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Product | Usage | | License | | Cost | | Remarks / Website | |
| **Ubuntu**  **16.04/ 16.12** | Linux based Operating | | MIT | | Free and open source | | <https://www.ubuntu.com/download/desktop>  Even Microsoft, Google and other IT giants partnering and funding this operating system. It comes in Mobile, Server and Desktop Editions. Redhat is also a very popular OS. | |
| **JQuery 3.1.1** | JavaScript library | | MIT | | Free and open source | | <https://jquery.com/>  It very famous client end JavaScript library, more than 80% websites are build with it. We are already using it for last 5 yrs in our all websites. | |
| **JQuery Mobile 1.4.5** | UI for Mobile development | | MIT | | Free and open source | | <http://jquerymobile.com/>  It is free Controls for mobile development, we are already using in our ptuApp. | |
| **Bootstrap 3.3.7 /**  **Bootstrap 4** | HTML5, CSS, and JS framework | | MIT | | Free and open source | | <http://getbootstrap.com/>  Bootstrap is the most popular HTML5, CSS, and JS framework for developing responsive, mobile first projects on the web.  We are already using it in our almost all projects for last 3 yrs. Digital Evaluation is our first project which is fully developed with Bootstrap. Bootstrap 4 is in alpha stage, very soon it will become product ready, and in future we will implement v.4 in our future products. | |
| **Telerik KendoUI** | HTML5, CSS, and JS framework | |  | | Free and paid | | A Telerik product, Some controls are free and remaining is paid from toolkit. We are already using it for last 5 yrs**. It is not compulsory to use it in our products, it is just for reference. We can use angular/typescript/bootstrap instead of this product.** | |
| **MySQL 5.7** | RDBMS system | | Open Source | | Free and Commercial versions. | | Free version has not restriction. But a commercial version is not for us. The latest version of MySql has more than 90% features which are available in Microsoft SQL Server. During my BPUT implementation, I work on MySql and migrate more than 4 crores entries into SQL Server (many times). | |
| **VS Code** | Code editor like Visual Studio | | MIT | | Free and open source | | <https://code.visualstudio.com/>  VS Code is Microsoft’s product for development for many languages like PHP, C#, MVC, Python, SQL, CSS, HTML5, Nodejs etc. Free. Open source. It runs everywhere like Linux, Windows and Mac Operating system.  But our current development is not possible in the software, because we are working on WebForms. Desktop application cannot be developed in this software. It is specially for browser based languages | |
| **Angular 4** | JavaScript MVVM framework | | MIT | | Free and open source | | <https://angular.io/>  A product by Google, it is growing day by day as a Client End framework, it  reduces the dependency of Server side languages, if we move on angular then we need HTML5/JavaScript/CSS3 / Angular Developers. There is no need to teach C#, SQL, MVC languages to all developers. | |
| **Typescript** | A superset of JavaScript | | MIT | | Free and open source | | A product by Microsoft, it a open source language which works with Angular. | |
| **Asp.Net Core 1.x** | Web Development Framework | | MIT | | Free and open source | | <https://www.asp.net/core>  ASP.NET Core is a framework for building web and cloud applications. ASP.NET Core is fully open source and available on Windows, Mac, and Linux.  With the help of Asp.Net Core, we can separate our UI from Database and other server side business logics like Transmission application. Mobile, Desktop and Website Development will become easy than before. | |
| **Visual Studio Community Edition** | Web, Mobile and desktop Development | | Prop  rietary | | Free but not Open Source | | **Paid versions are available as Enterprise organizations are defined as >250 PCs or > $1 Million US Dollars in annual revenue.**  We are using Free Community edition since 2013. It runs on Windows and Mac OSs. | |
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| Mobile Development | | | | | | | | |
| Apache Cordova | | hybrid Windows, IPhone, Android | | MIT | | Free and open source | | Technologies used in hybrid app: HTML5, CSS3, JavaScript.  Particular Frameworks/UI/Libraries : JQuery, JQuery Mobile, Bootstrap, Angular, Typescript, Asp.Net Core.  Development is cheap comparative Native Developments |
| Xamarin | | Native Windows, IPhone, Android | | Proprietary | | Free with Visual Studio | | Technologies used in native app: C#, Native UIs for every OSs, Asp.Net Core  Development is costly comparative hybrid. |
| Native WebView and Hybrid Application Features   |  |  |  |  | | --- | --- | --- | --- | | **App Features** | **Native** | **HTML5/Webview** | **Hybrid** | | **Graphics** | Native APIs | HTML5, Canvas, SVG | HTML5, Canvas, SVG | | **Performance** | Fast | Slow | Slow | | **Native look and feel** | Native | Emulated | Emulated | | **Distribution** | Appstore | Web | Appstore | | **Development cost** | Expensive | Reasonable | Reasonable | | **Development time** | Long | Fast | Fast | | **Portability** | None (require each platform knowledge) | High | High | | **Updates & Maintenance** | Hard | Easy | Easy | | **Graphical performance** | High | Moderate | Moderate | | **Device Access** | | | | | **Camera, Notifications, Contacts, calendar, Pinch, spread** | Yes | No | Yes | | **Offline storage** | Secure file storage | Shared SQL | Secure file system, shared SQL | | **File upload, Gyroscope, Accelerometer, Swipe Navigation, Microphone, Swipe, Geo-location** | Yes | Yes | Yes | | **Connectivity** | Online and offline | Mostly online | Online and offline | | **Development skills** | ObjectiveC, Java, C# | HTML5, CSS, Javascript | HTML5, CSS, Javascript | | **Best Used For** | Games or consumer-focused apps where performance, graphics, and overall user experience are necessary | Apps that do not have high performance requirements, but need full device access | Apps that do not have high performance requirements, and do not need push notifications or access to contacts | | | | | | | | | |