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How to build an Android app using Cordova and VueJS

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In this tutorial, we will cover using Cordova to convert a web app written in Javascript to the Android platform in just a matter of minutes!

Writing a native Android app is not possible for everyone of us. As a web developer, I would have to learn the the Android SDK from ground up, which is too intimidating and a lot of work. Rather, what if I could make a web app and convert it into an Android app? – Sounds good enough to be true?

One of the options would be to embed the web view of your

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productive! Sometimes, we only need a very limited set of features in our app, or the UI needs to be a bit different to better suit mobile usability and many other such limitations. Embedding a web app in a web view doesn't always work.

Today, we will create a basic ToDo app for the Android platform by using Cordova to see just how easy it can be.

Installation

Cordova command-line runs on Node and is available to install through npm. We can install Cordova with the following command:

```
sudo npm install -g cordova
```

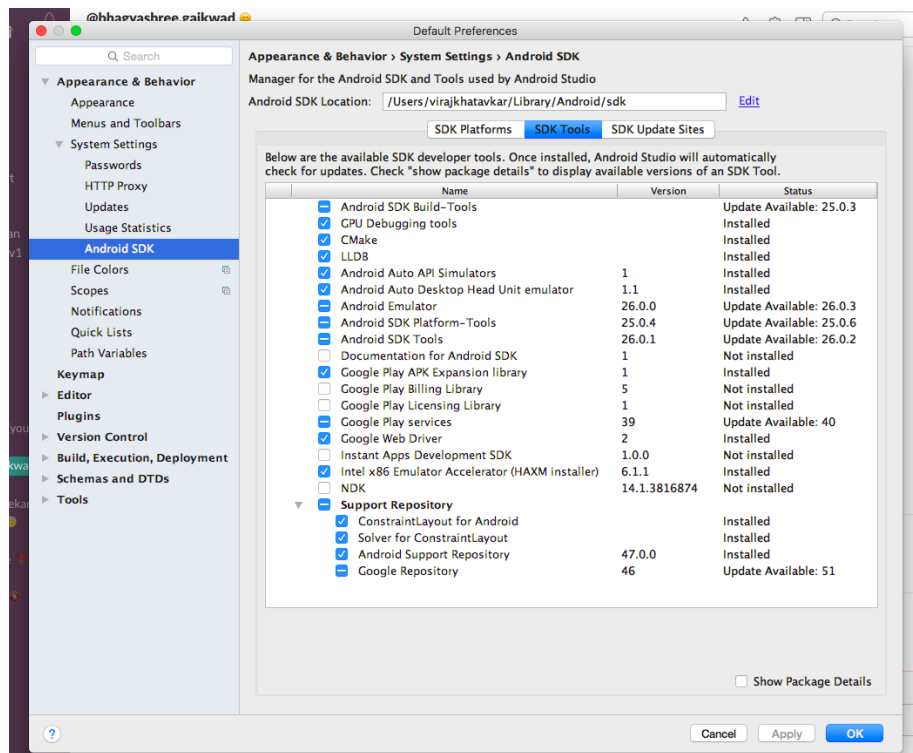
This will install all the necessary JavaScript libraries through npm.

Next, we need to make sure that the Android SDK is installed on our workstation. The SDK should be installed so as to make Cordova able to convert our JavaScript app into an Android app.

We can install download the latest SDK from [this link](#).

After the SDK installation is completed, we need to download a set of SDK tools. You can do so in the following steps (or see a detailed set of instructions on [this link](#)):

1. Open Android Studio
2. Go to Preferences
3. Go to Appearance & Behavior → System Settings → Android SDK
4. You can see a list of tools as options to be installed
5. Make sure the options shown in the image below are checked



Create a New Cordova App

Once we complete the installation, we need to first create a new app with Cordova. We can do so with the following command:

```
cordova create todo-mobile-app-cordova-vue
```

Next, cd into the project directory, add a platform, for which you need to create an app. Cordova currently supports the following platforms:

1. Android
2. IOS
3. Blackberry
4. OSX
5. WebOS
6. Windows
7. Browser

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android platform:

```
cd todo-mobile-app-cordova-vue
```

```
cordova platform add android
```

ToDo App

We will use Vue to create a ToDo SPA. The intent of this article is to guide on converting JavaScript app into an Android app, hence, we will focus on that and not concentrate on how to build a JavaScript app.

Let us set up our default routes, components and the bootstrap in the `resources/assets/js/app.js` file:

```
/**
 * First we will load all of this project's JavaScript
 * includes Vue and other libraries. It is a great s
 * building robust, powerful web applications using
 */

require('./bootstrap');

window.Vue = require('vue');

import Vue from 'vue'
import VueRouter from 'vue-router'

// 1. Define route components.
// These can be imported from other files
let Todo = require('./components/ToDo.vue');

// 2. Define some routes
// Each route should map to a component. The "compor
// either be an actual component constructor createc
// Vue.extend(), or just a component options object.
const routes = [
```

```
// 3. Create the router instance and pass the `route
// You can pass in additional options here, but let'
// keep it simple for now.
const router = new VueRouter({
  routes
})

Vue.use(VueRouter);

Vue.component('navigation', require('./components/Na
Vue.component('create-task', require('./components/C

// 4. Create and mount the root instance.
// Make sure to inject the router with the router op
// whole app router-aware.
window.onload = function () {
  const app = new Vue({
    router
  }).$mount('#app');
}

router.push('/tasks');
```



In the above example, we have set up the application, necessary dependencies and the routes. At the end of the file, we are specifying the route that the application should be redirected to by default.

Next, let's look into the ToDo Vue component:

```
<template>
  <div class="container">
    <div class="row">
      <div class="col-sm-12">
        <create-task @created="pushTask"></c
      </div>
    </div>
    <div class="row">
      <div class="col-sm-12" v-for="task in ta
```



```

        <div class="form-group">
          <input type="text" class="form-control" value="" />
        </div>
      </div>
    </div>
  </div>
</template>

<script>
  export default {
    data() {
      return {
        title: ''
      }
    },
    methods: {
      createTask() {
        let task = {
          title: this.title
        };

        this.$emit('created', task);
        this.title = '';
      }
    }
  }
</script>

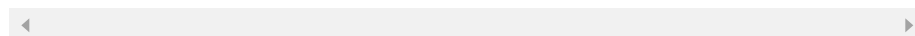
```

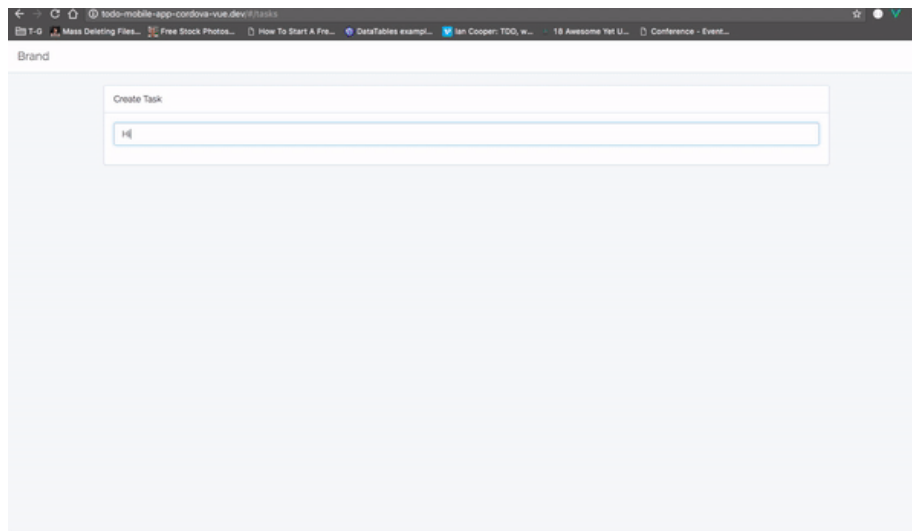


You can run the app on browser with following commands:

```
cordova platform add browser
```

```
cordova run browser
```





Converting to Android

Connect your mobile device to laptop or PC. Make sure that the debugging mode is switched on. To run the Android app on your mobile, you can execute the following command:

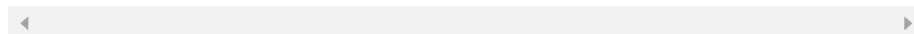
```
cordova run android
```



It will build and install the apk on your mobile. The app will open on your device and you can play with it.

Alternatively, if you want to run the app on emulator, you can do so with the following command:

```
cordova run android --emulator
```



Configuration

Your app has a `config.xml` file which serves as an configuration for variety of options:

The name of the app:

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The description:

```
<description>
  A ToDo app for Pusher using Cordova and Vue
</description>
```

Author information

```
<author email="viraj@virajkhatavkar.com" href="ht
  Apache Cordova Team
</author>
```

Icon for the app:

```
<icon src="res/ios/icon.png" platform="ios" width
```

If you don't specify a icon, the default icon from Cordova will be used.

You can go over the other configuration options as listed on the [link here](#).

Plugins

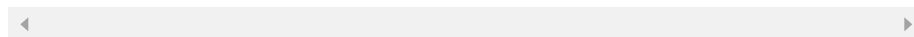
Most of the times, we need to interact with native features of our device to be embedded into our app. Cordova gives a very fluent and user-friendly API to achieve the same. Cordova has many plugins available to take care of normal use-cases:

1. Battery Status
2. Camera
3. Geolocation

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To add a plugin to your application, you can do so by using a simple command:

```
cordova plugin add plugin-name
```



The above listed are only some of the plugins available. You can see the whole list of available plugins and their working on the [official documentation](#)

Conclusion

In this article, we have covered how to create an Android application using Vue and Cordova. We have covered the configuration options necessary to get started, and the example above should help you fill in the gaps and give an overview of some of the other configuration options available to you.

The code is hosted on public [Github repository](#). You can download it for educational purposes. How do you intend to use Cordova? Can you think of any advanced use cases? What are they? Let us know in the comments!

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Name



Didi Pool • a year ago

Sorry, but this article is very poor in terms of details and how to properly set the vue code in the cordova environment.

4  |  • Reply • Share ›



Michelle Perez Morales ➔ Didi Pool • 10 months ago

**Victor Bastos** • 2 years ago

You didn't say anything about the webpack dependency and build steps. Without that nothing works.

2 ^ | v • Reply • Share ›

**Viraj Khataavkar** → Victor Bastos • 2 years ago

I didn't notify it because I thought the syntax is sufficient enough to focus on that. If it's creating confusion, I'll add to it :)

1 ^ | v • Reply • Share ›

**Stretsh** → Viraj Khataavkar • a year ago

When one runs into a HowTo like this, they usually expect more detail and/or explanation. Victor talks about the dependencies, but there is more...

For instance: You app.js file references a bootstrap.js file and 3 .vue files. The content of 2 of them is discussed here, but no mention of whether or not the bootstrap file and the nav vue file are required or how they are involved.

And yes, I have seen the link to the final product on GitHub, but in that case, you might as well have written an article saying "Hey guys, I have set up a simple todo app in Cordova and Vue and I want to share it with you. Here it is and here are some things I want to highlight."

The confusuin is in what the reader expects from the title and intro versus what is presented.

1 ^ | v • Reply • Share ›

**Andre Asselin** • 2 years ago

I have a template compatible with vue-cli that puts all this together with some scripts for building. It's on github at <https://github.com/BlueOakJ...>, and can be used with vue-cli like so:

```
vue init blueoakjs/vue-cordova-template my-project
```

1 ^ | v • Reply • Share ›

**Ben** • 3 months ago

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```
vue create my-project
cd my-project
vue add cordova
```

More info under <https://github.com/m0dch3n/...>

^ | v • Reply • Share ›



Михаил • 4 months ago

So... is there any interface that allow to work html5 features as native, like navigation, payments and etc? Will my app fully comatiabile with any other platform, if i created it first as html5 only?

^ | v • Reply • Share ›



tasfia • 8 months ago

After installing the plugin where should i put my put to work with it?

^ | v • Reply • Share ›



tasfia → tasfia • 8 months ago

Sorry for the mistake, where should i put my code

^ | v • Reply • Share ›



Michelle Perez Morales • 10 months ago

not find the path where you create the app.js file ?

^ | v • Reply • Share ›



Michelle Perez Morales