



# Ionic

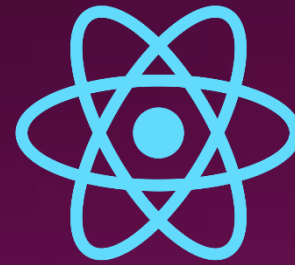
Par Robin Delbaere

# Qu'est ce qu'Ionic ?

- Framework multiplateforme
- Application hybride
- Technologies web

- Avantages
  - Productivité
  - Support multiplateforme
  - Documentation
  - Interface utilisateur
- Inconvénients
  - Performance

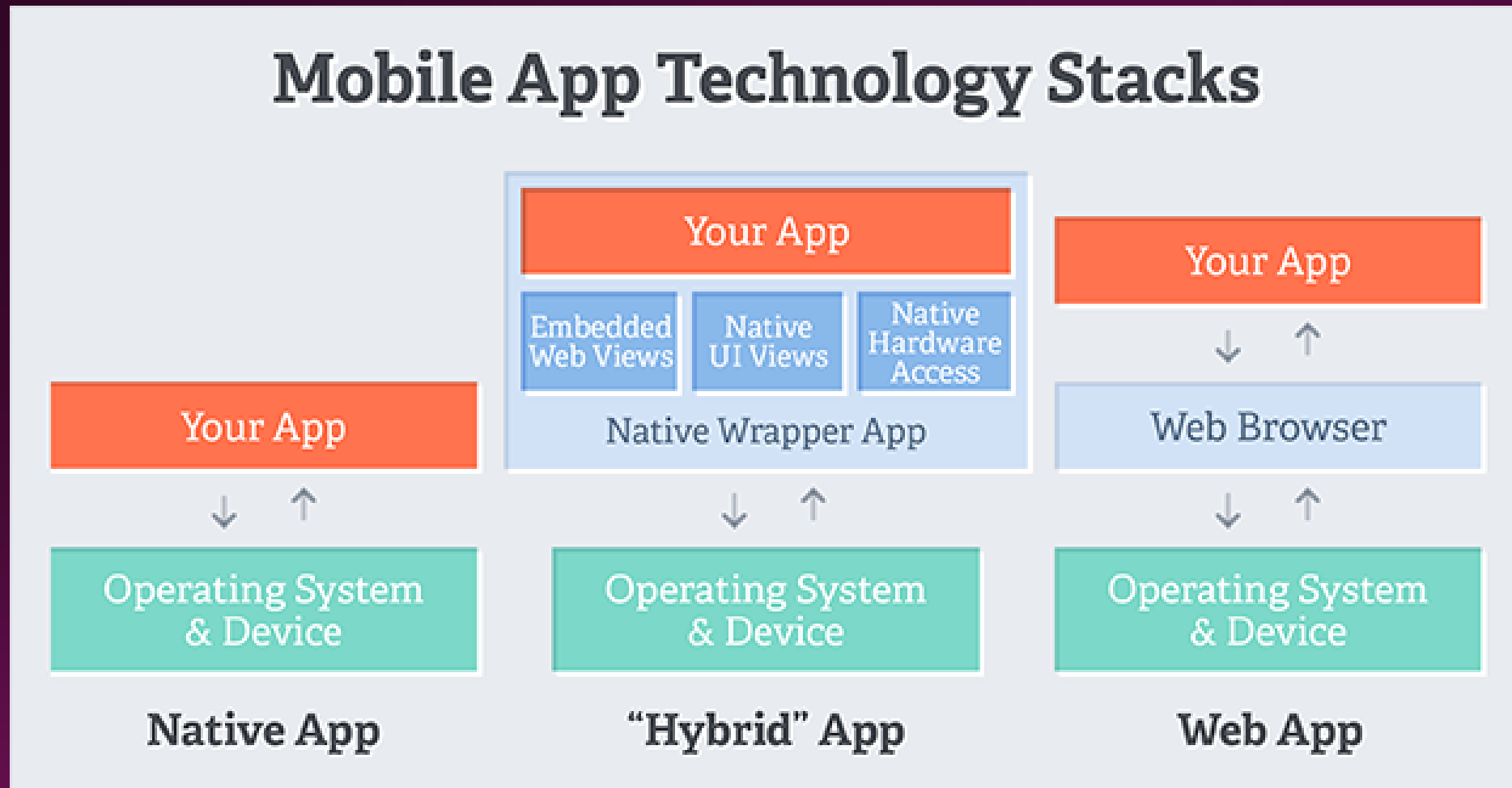
# D'autres Frameworks ?



Xamarin



# Application Mobile



# Technologies embarquées



# Plateforme supportées



# Composants Ionic

UI Components



Ionic CLI



Ionic Native



Ionicons



# Installation

- Installer NodeJS
  - <https://nodejs.org>
- Installer les modules
  - `λ npm install -g cordova ionic`

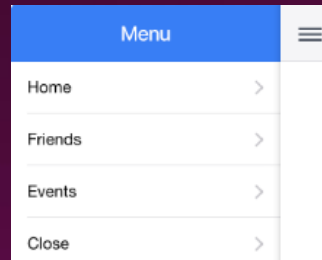
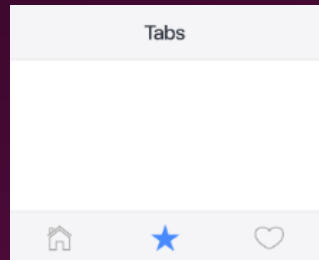
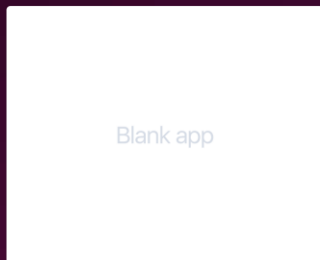


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- Installer le SDK Android
    - <https://cordova.apache.org/docs/en/latest/guide/platforms/android/index.html>
  - Installer le SDK iOS
    - <https://cordova.apache.org/docs/en/latest/guide/platforms/ios/index.html>



# Créer un projet

- Générer un projet
  - `λ ionic start Soundio`
- Choisir un template

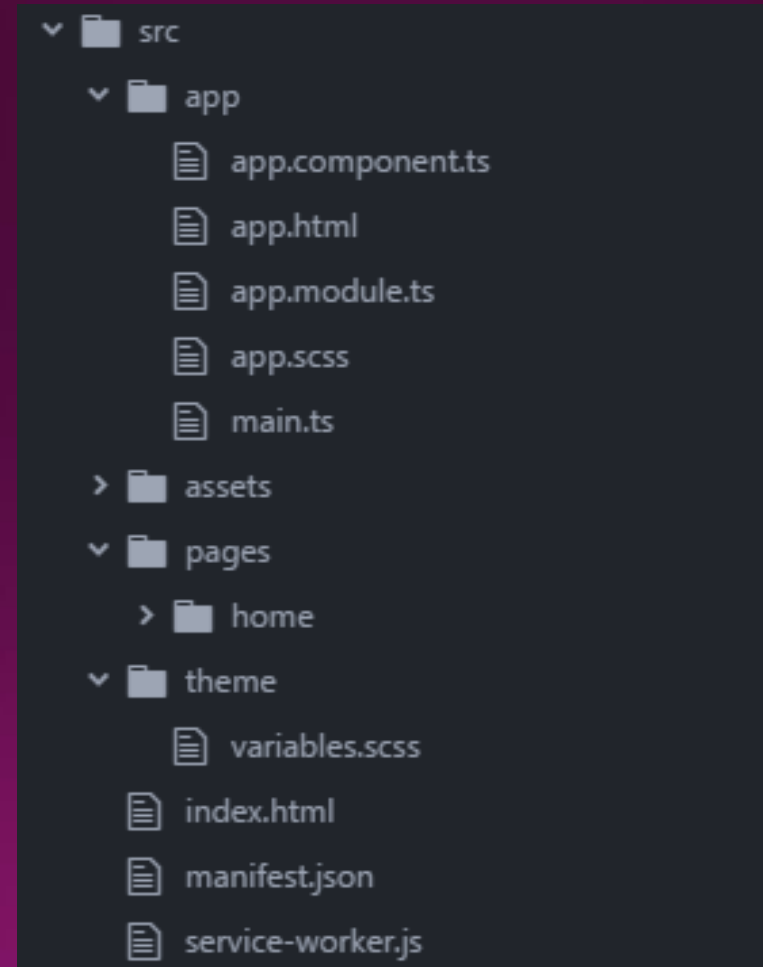
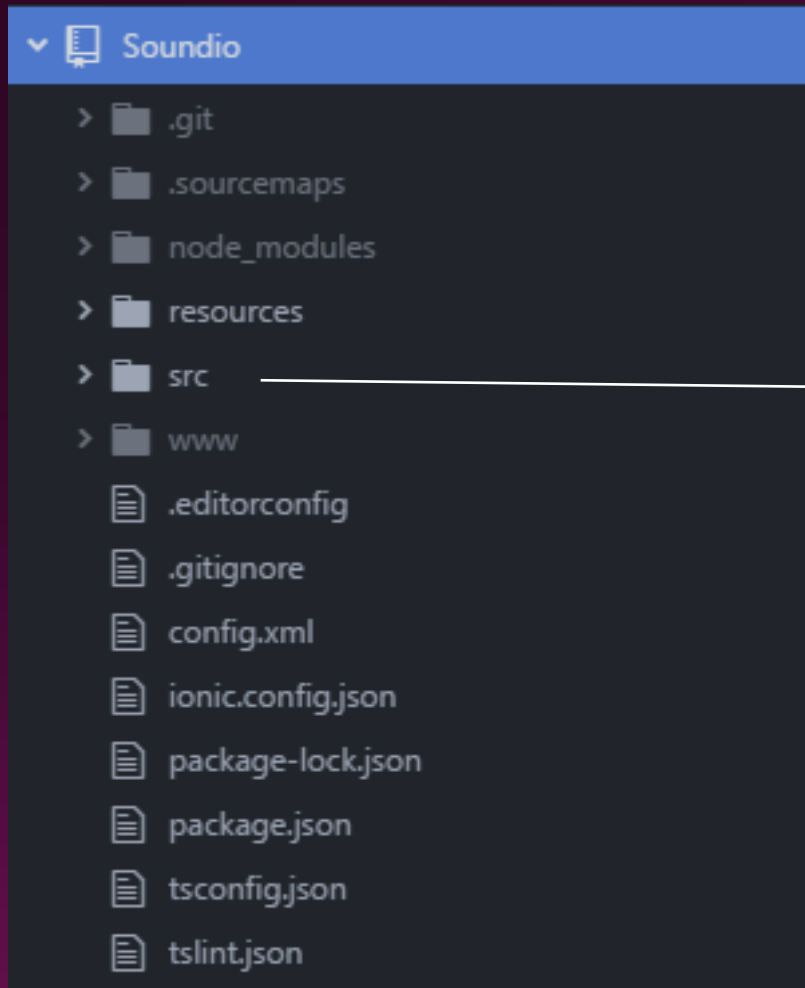


- Lancer l'application
  - `λ ionic serve`
  - `λ ionic lab`

- Lancer dans un émulateur
  - `λ ionic cordova emulate android`
- Lancer sur un terminal
  - Connecter votre smartphone
  - Activer le mode développeur
  - `λ ionic cordova run ios`

Ces options nécessitent l'installation des SDKs

# Structure du projet



# Le composant racine

app.component.ts

```
import { Component } from '@angular/core';
import { Platform } from 'ionic-angular';
import { StatusBar } from '@ionic-native/status-bar';
import { SplashScreen } from '@ionic-native/splash-screen';

import { HomePage } from '../pages/home/home';
@Component({
  templateUrl: 'app.html'
})
export class MyApp {
  rootPage:any = HomePage;

  constructor(platform: Platform, statusBar: StatusBar, splashScreen: SplashScreen) {
    platform.ready().then(() => {
      // Okay, so the platform is ready and our plugins are available.
      // Here you can do any higher level native things you might need.
      statusBar.styleDefault();
      splashScreen.hide();
    });
  }
}
```

app.html

```
<ion-nav [root]="rootPage"></ion-nav>
```

# Les pages

```
import { Component } from '@angular/core';
import { NavController } from 'ionic-angular';

@Component({
  selector: 'page-home',
  templateUrl: 'home.html'
})
export class HomePage {

  constructor(public navCtrl: NavController) {

  }

}
```

```
<ion-header>
  <ion-navbar>
    <ion-title>
      Soundio
    </ion-title>
  </ion-navbar>
</ion-header>

<ion-content padding>
  Hello World
</ion-content>
```

- Générer une page
  - `λ ionic generate page list --no-module`
- Enregistrer dans le module
  - Dans les déclarations
  - Dans les points d'entrées

# Naviguer entre les pages

- Dans le composant

```
import { NavController } from 'ionic-angular';  
import { ListPage } from '../list/list';
```

```
constructor(public navCtrl: NavController)
```

```
this.navCtrl.push( ListPage );
```

- Dans le template

```
import { ListPage } from '../list/list';
```

```
export class HomePage {  
  listPage = ListPage;
```

```
  constructor() {  
  }  
}
```

```
this.navCtrl.push( ListPage, {  
  from: 'home'  
});
```

```
import { NavParams } from 'ionic-angular';
```

```
constructor( public navParams: NavParams ){  
  console.log( this.navParams.get('from') );  
}
```

```
<button [navPush]="listPage">  
  Découvrir nos playlists  
</button>
```

```
params = { from: 'about' };
```

```
<button [navPush]="listPage" [navParams]="params">  
  Découvrir nos playlists  
</button>
```

# Les composants UI

- Bouton

```
<button ion-button>
  Découvrir nos playlists
</button>
```

```
<button ion-button small round color="secondary">
  Découvrir nos playlists
</button>
```

- Alerte

```
import { AlertController } from 'ionic-angular';
```

```
showAlert() {
  let alert = this.alertCtrl.create({
    title: 'A propos',
    subTitle: 'Super application de musique',
    buttons: ['Fermer']
  });
  alert.present();
}
```

- Liste

```
<ion-list>
  <ion-item>Item</ion-item>
  <ion-item>Item</ion-item>
</ion-list>
```

```
<ion-list>
  <button ion-item>Item</button>
  <button ion-item>Item</button>
</ion-list>
```

- Grille

```
<ion-grid>
  <ion-row>
    <ion-col col-12 col-md-6>Item</ion-col>
    <ion-col col-12 col-md-6>Item</ion-col>
  </ion-row>
  <ion-row>
    <ion-col col-6 col-xl-3>Item</ion-col>
    <ion-col col-6 col-xl-3>Item</ion-col>
  </ion-row>
</ion-grid>
```

# Ionic Native

- Installer un composant

```
λ ionic cordova plugin add cordova-plugin-camera
```

```
λ npm install --save @ionic-native/camera
```

- Injecter le service

```
import { Camera } from '@ionic-native/camera';
```

```
providers: [  
  // ...  
  Camera,  
  // ...  
]
```

- Exemple d'utilisation

```
this.camera.getPicture(options).then((imageData) => {  
  this.pic = 'data:image/jpeg;base64,' + imageData;  
}, (err) => {  
  console.log( err );  
});
```

# Ionic DevApp

- Installer l'application *Ionic DevApp*
- Créer un compte Ionic
- Se connecter au réseau Wifi
- Lancer votre application
  - `λ ionic serve`





# Icone et Splashscreen

- Icone
  - Dimension : 1024x1024
  - Placer dans `resources\icon.png`
- Icone
  - Dimension : 2732x2732
  - Zone d'affichage : 1200x1200
  - Dans le dossier
- Générer les ressources
  - `λ ionic cordova resources`

# Ionic Pro

- Services cloud
  - Creator
- View App
- Package
- Deploy
- Monitor

