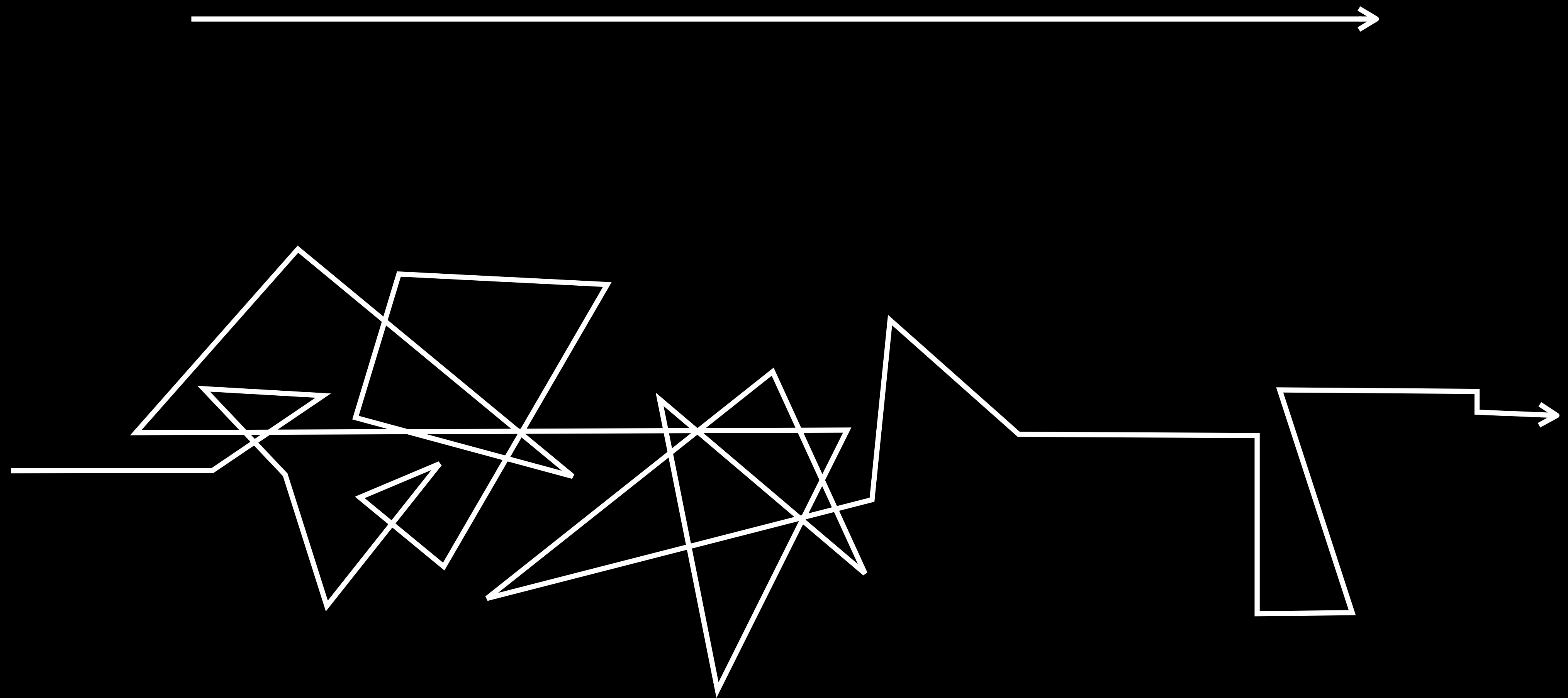


Navigation et architecture

Organiser son app

Navigation should feel natural and familiar, and shouldn't dominate the interface or draw focus away from content. In iOS, there are three main styles of navigation.

Navigation - iOS Human Interface Guidelines - Apple

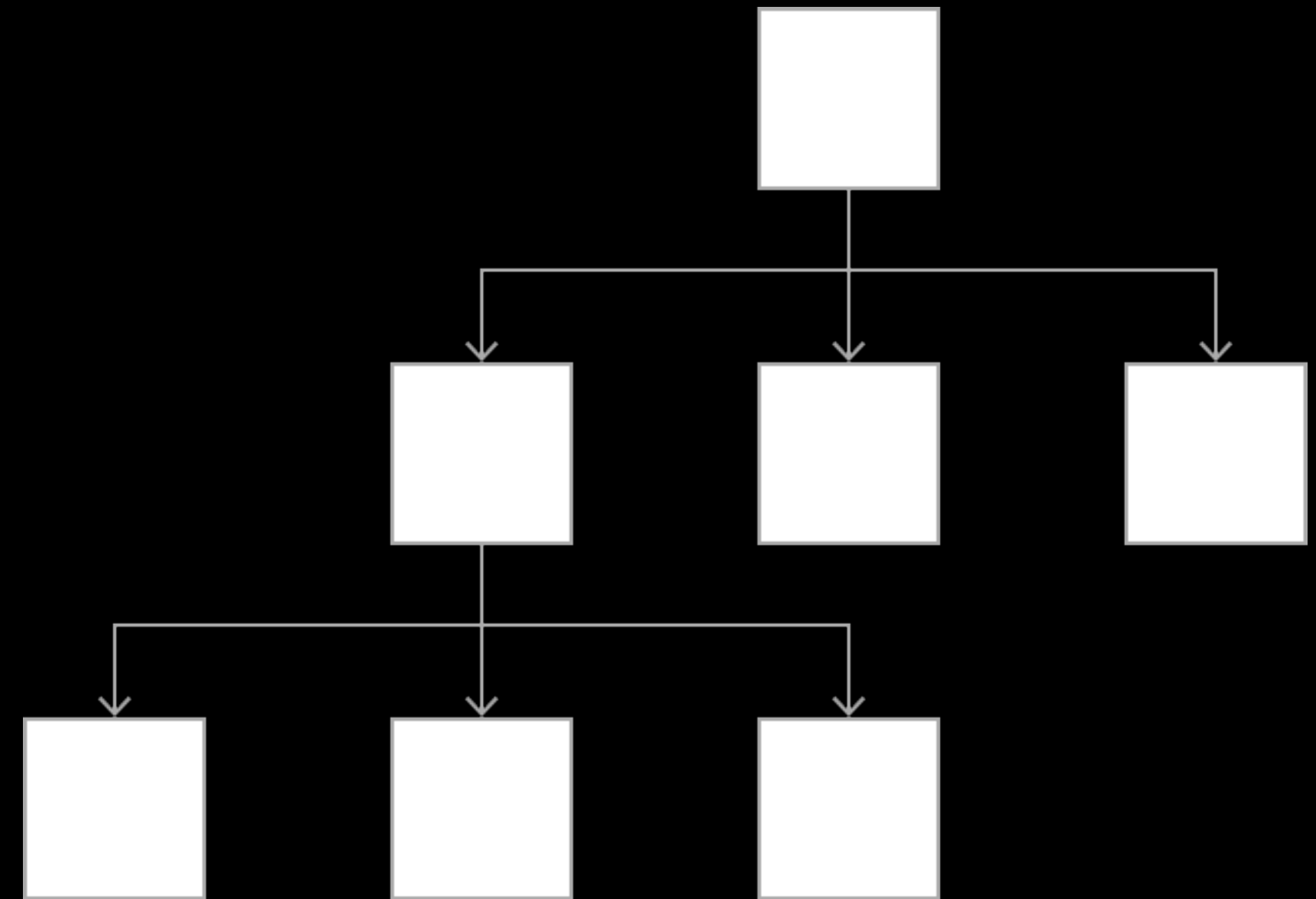


3 types de navigation

- Navigation hiérarchique
- Navigation à plat
- Navigation guidée par le contenu

Navigation hiérarchique

- Un choix par écran, jusqu'à destination
- Pour aller à une autre destination il faut rebrousser chemin, et faire d'autres choix
- Idéal pour les données hiérarchiques

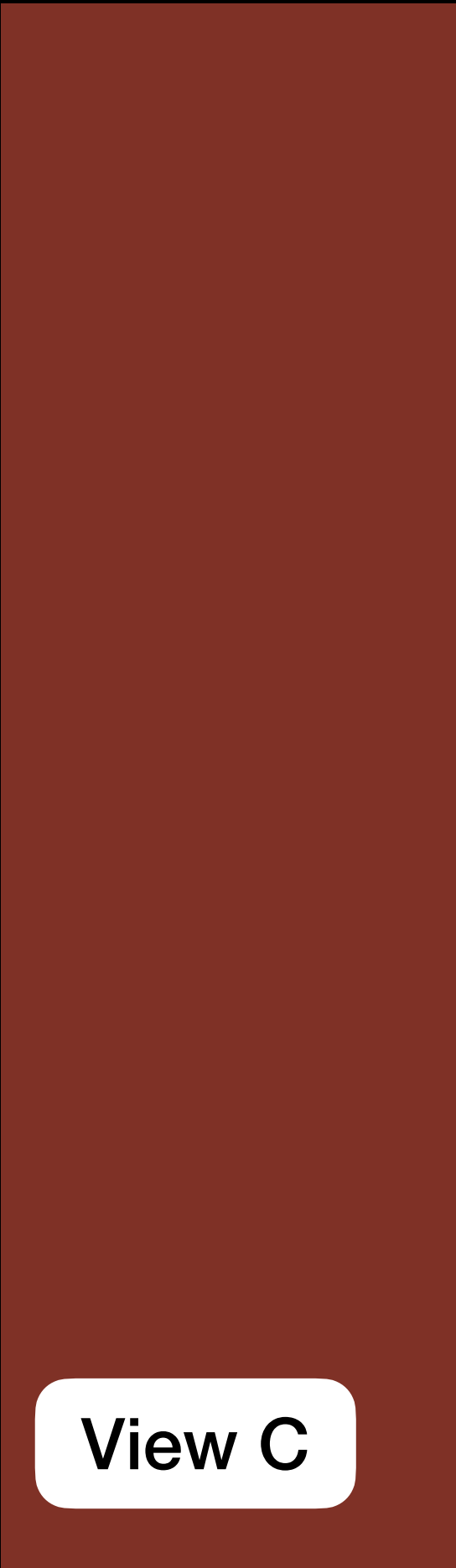
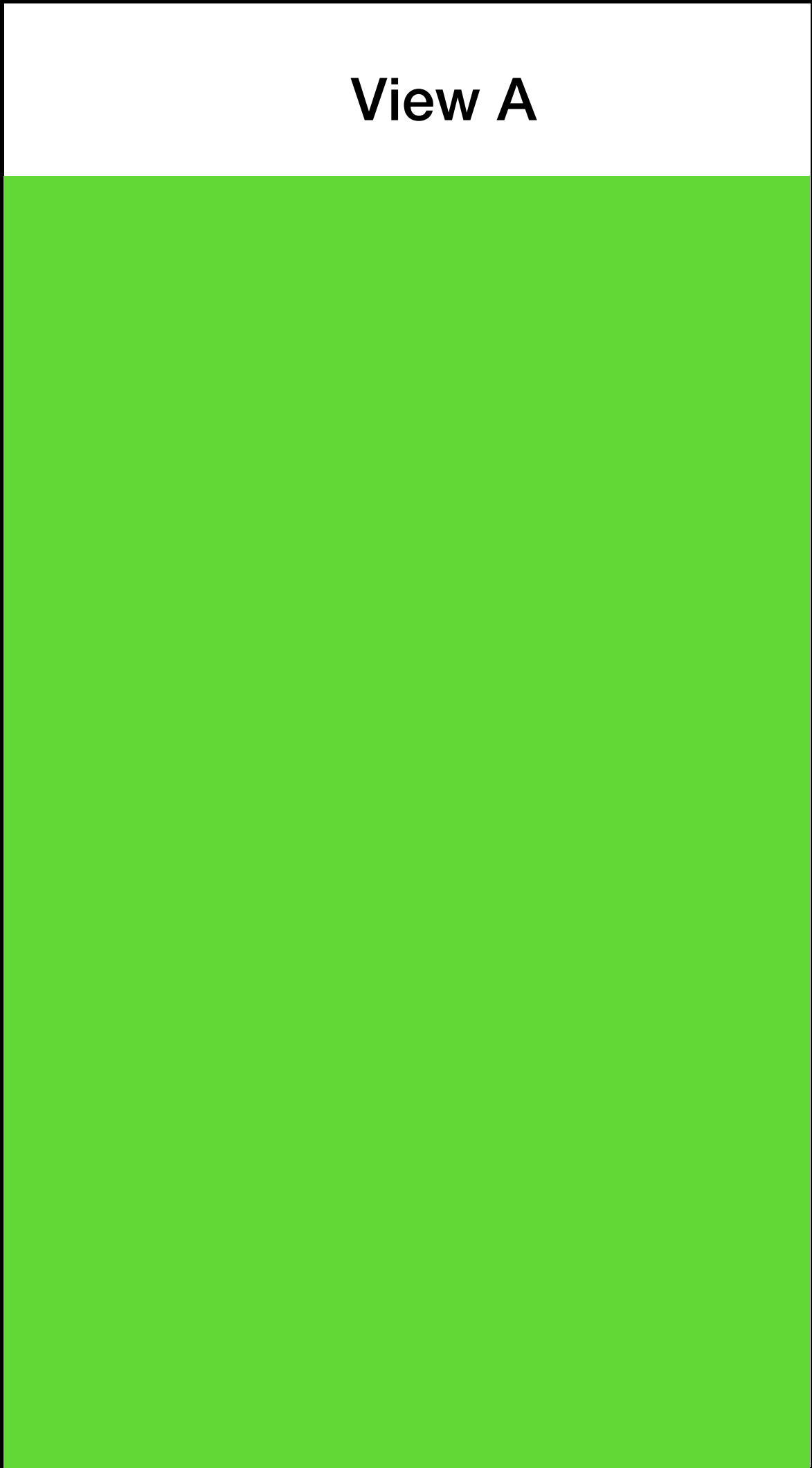


Navigation hiérarchique

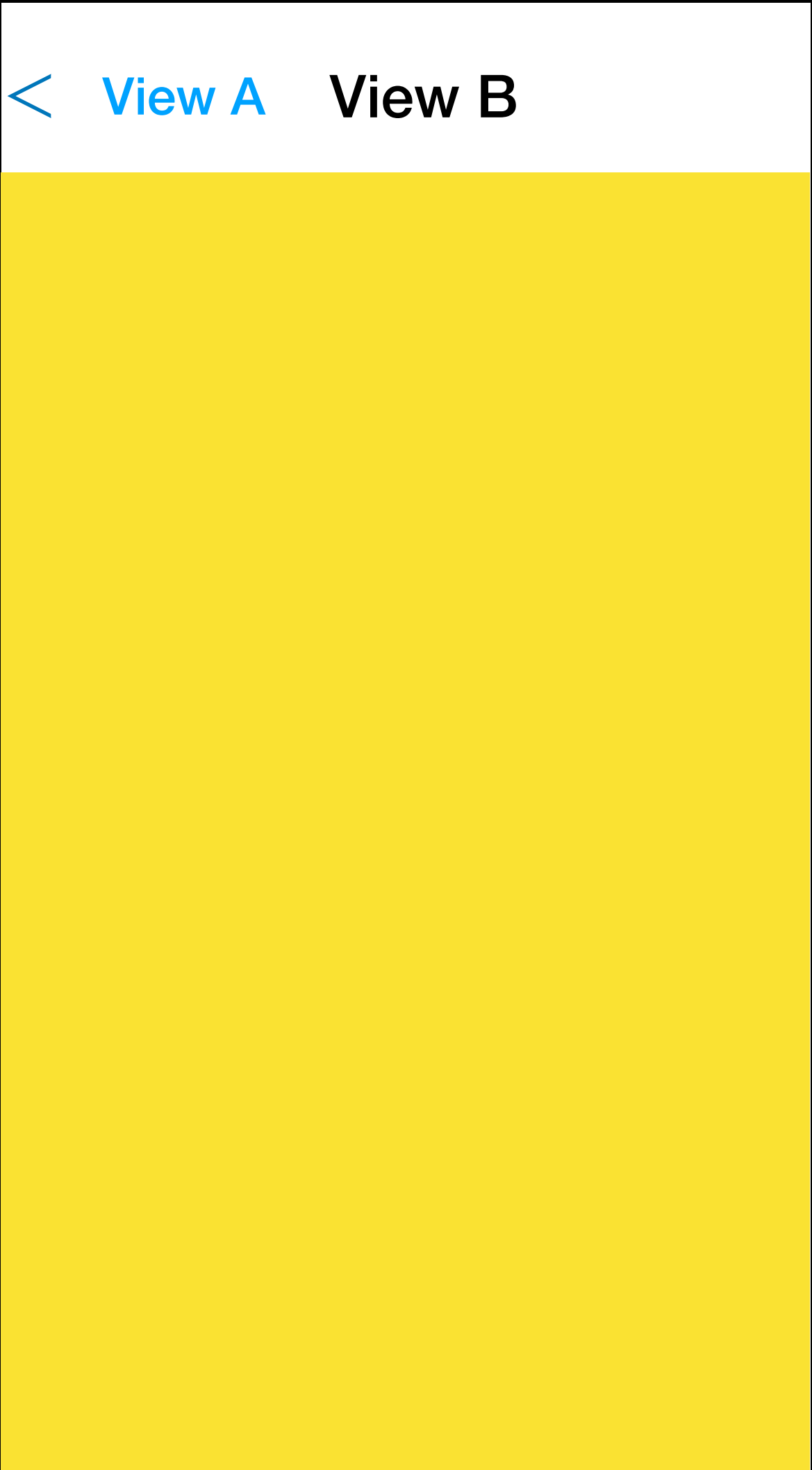
NavigationView

View A

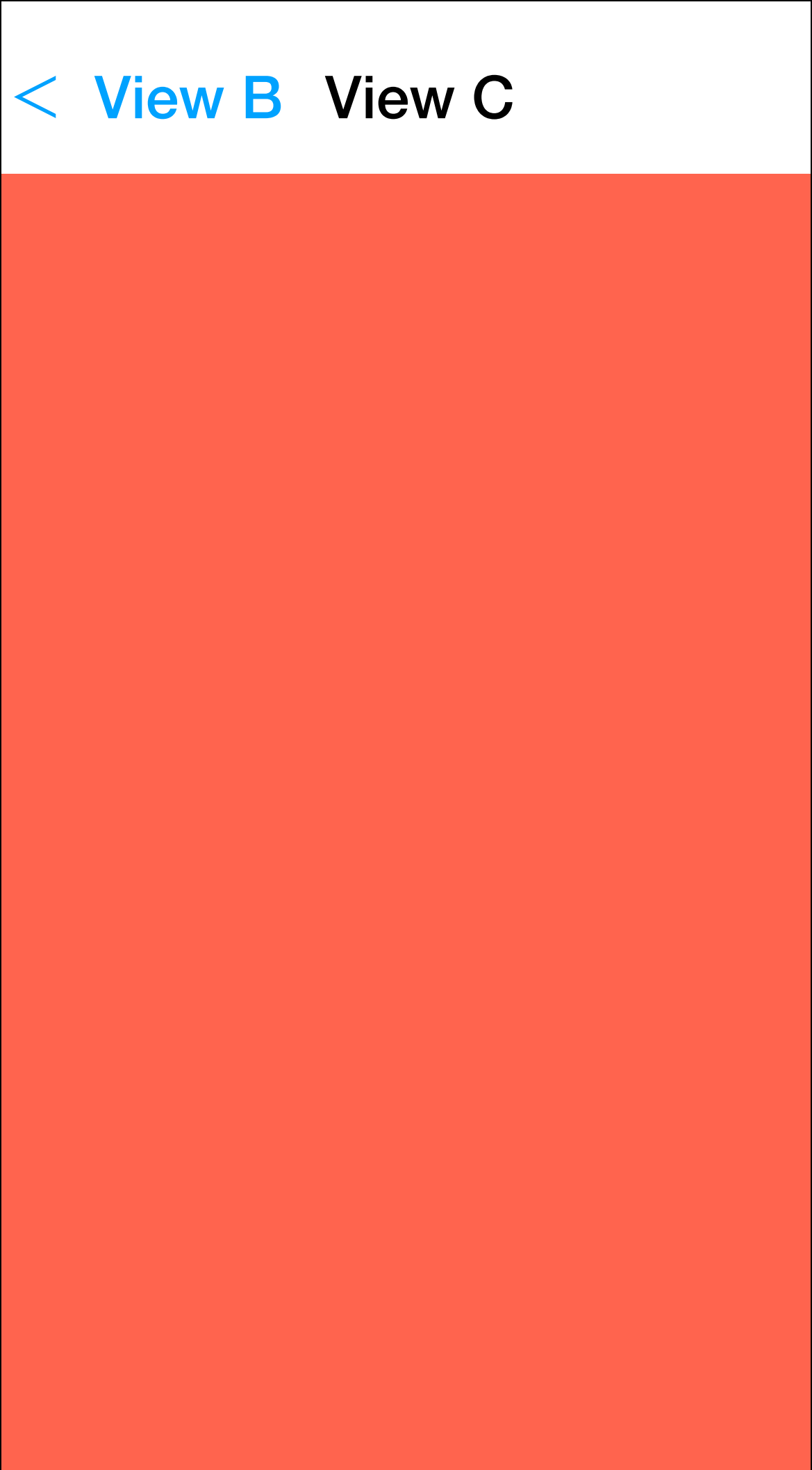
Navigation hiérarchique



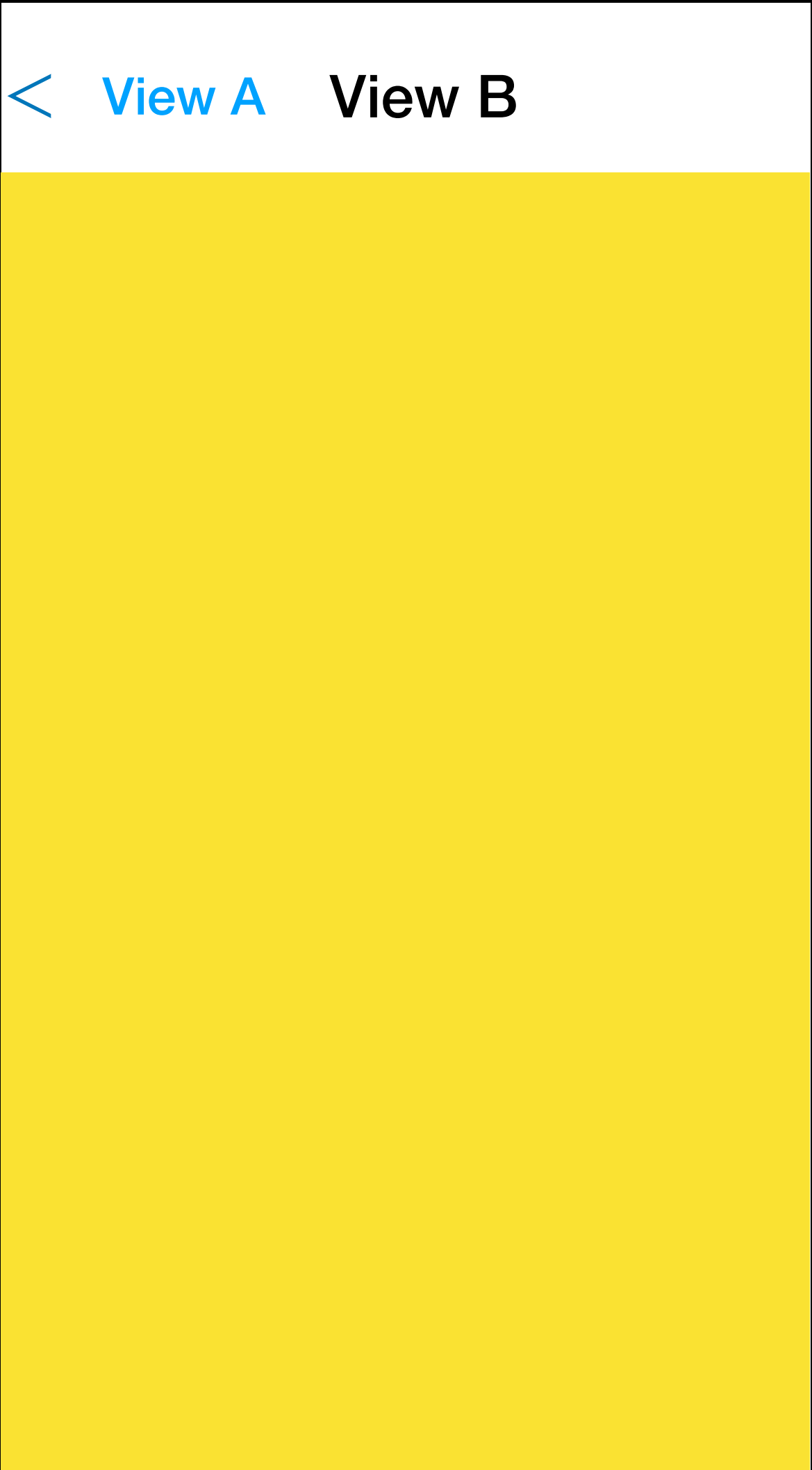
Navigation hiérarchique



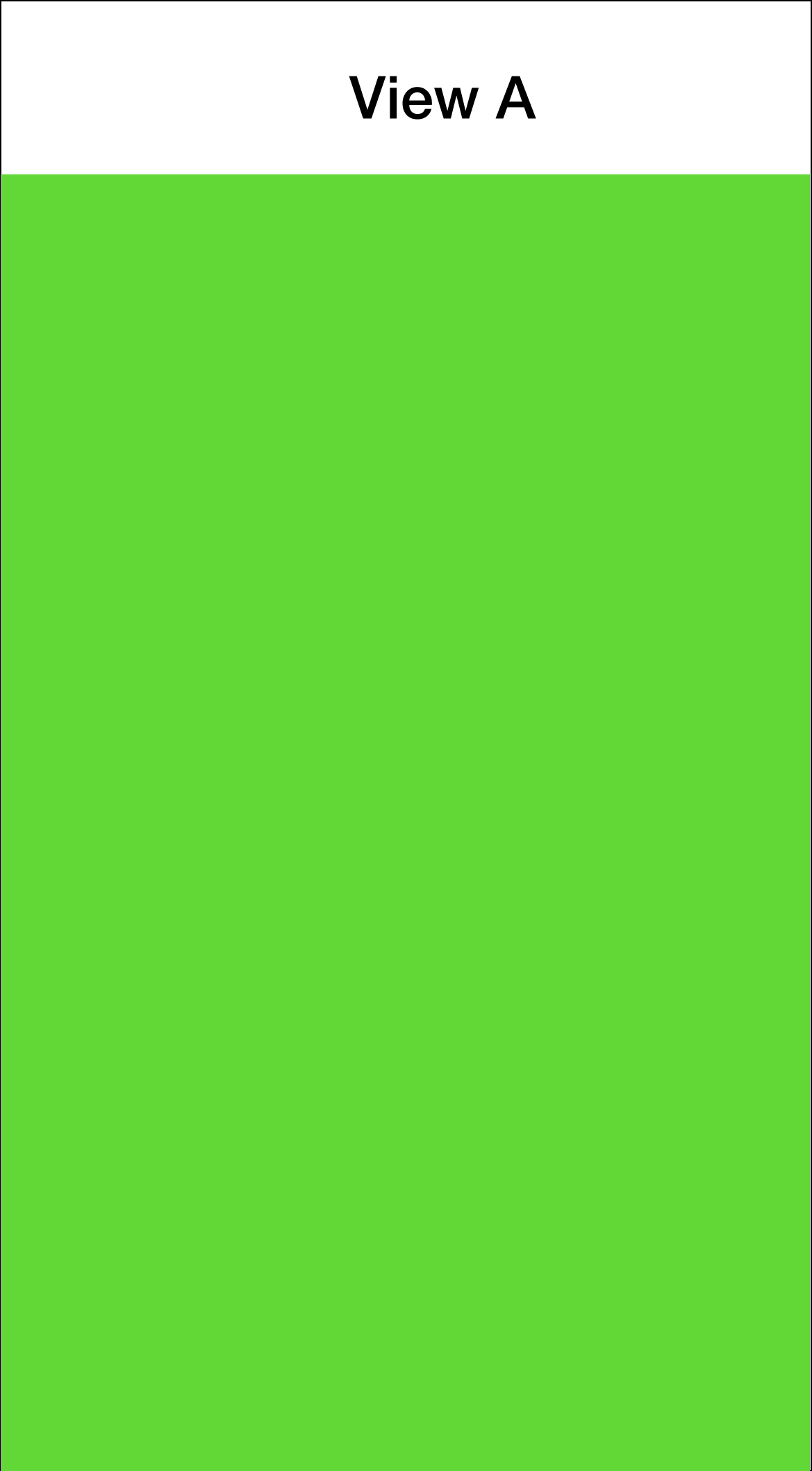
Navigation hiérarchique



Navigation hiérarchique



Navigation hiérarchique

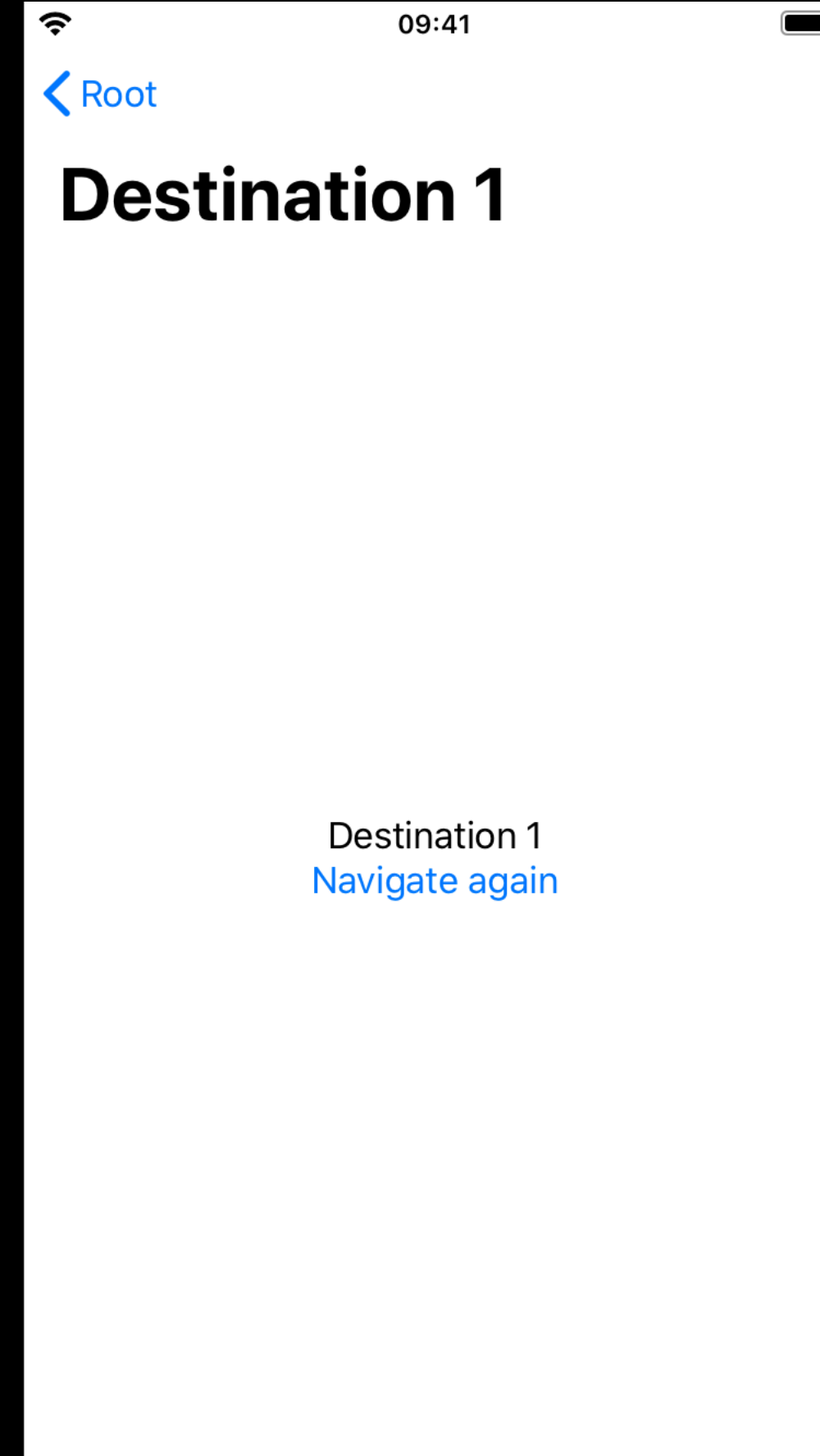
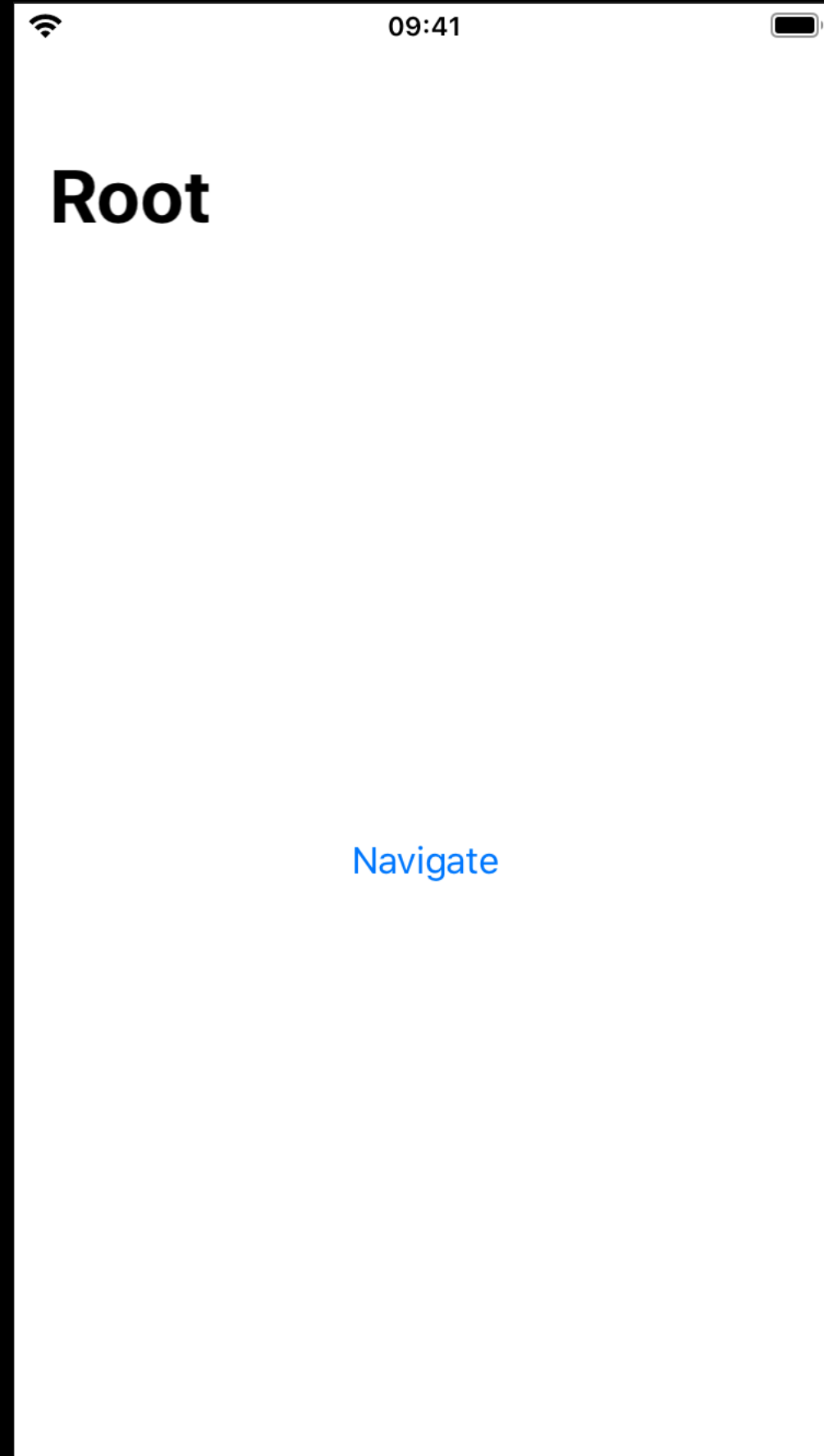


Navigation hiérarchique

- Une NavigationView est nécessaire pour ce type de navigation
 - Elle doit contenir la vue "point de départ" de la navigation
 - Les vues peuvent avoir un navigationBarTitle qui sera utilisé comme titre si affichés dans une NavigationView
- Un NavigationLink permet de faire afficher un autre écran dans la NavigationView
 - La NavigationView ajoute un bouton "Back" pour revenir à l'écran précédent

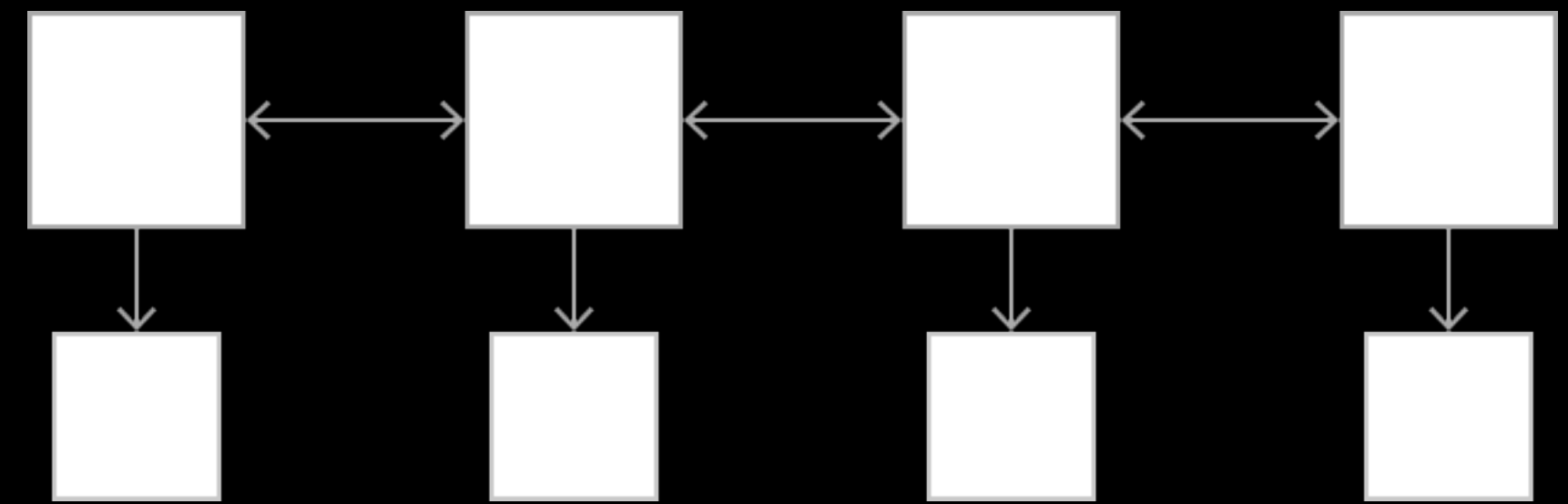
```
struct NavigationDemo: View {
    var body: some View {
        NavigationView {
            NavigationLink(destination: DestinationView(textToDisplay: "Destination 1") ) {
                Text("Navigate")
            }.navigationTitle("Root")
        }
    }
}
```

```
struct NavigationDemo: View {  
    var body: some View {  
        NavigationView {  
            NavigationLink(destination: DestinationView(textToDisplay: "Destination 1")) {  
                Text("Navigate")  
            }.navigationTitle("Root")  
        }  
    }  
}
```



Navigation à plat

- Pour sélectionner des destinations différentes
- Idéal pour des catégories de données différentes



Navigation à plat

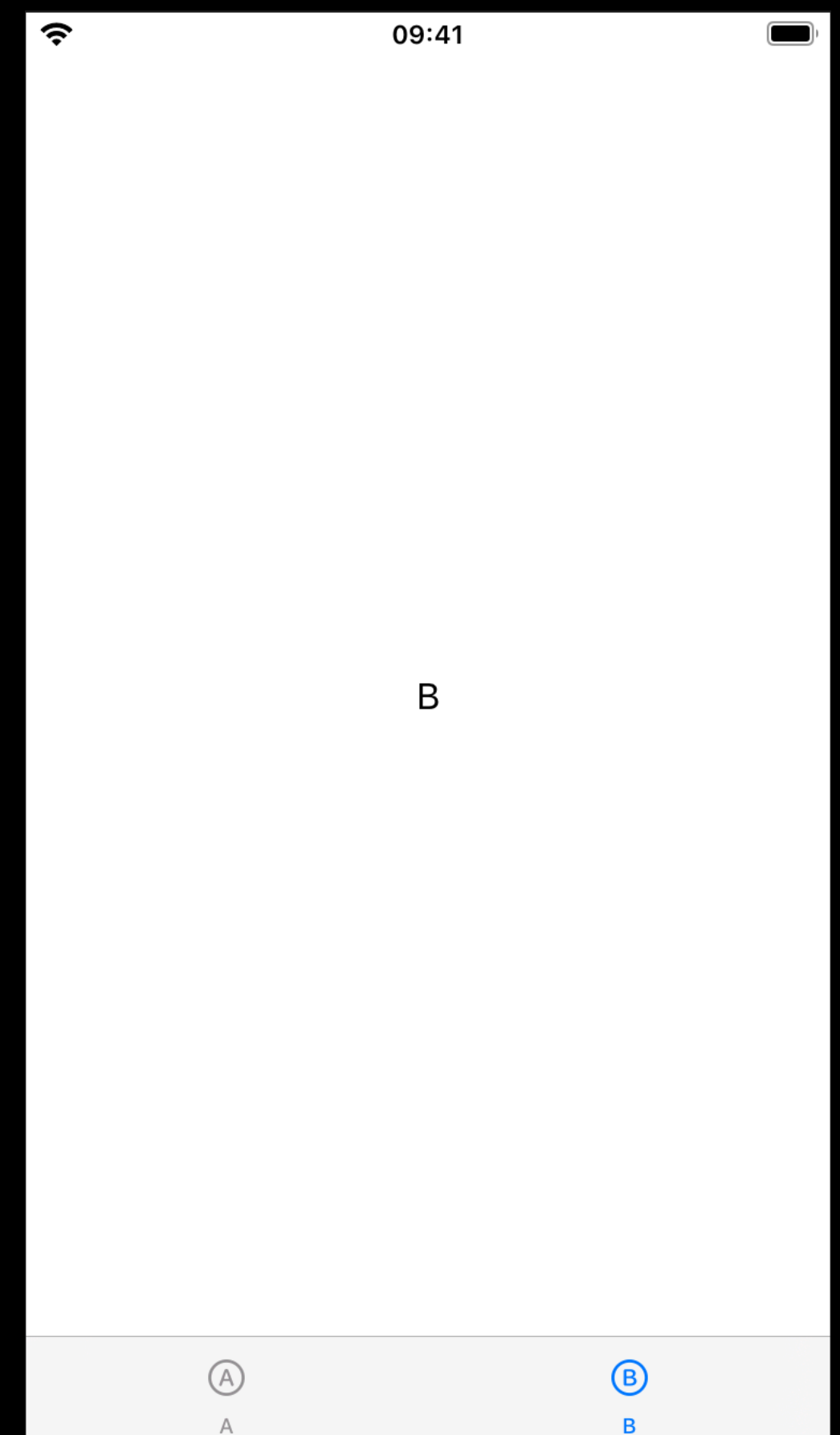
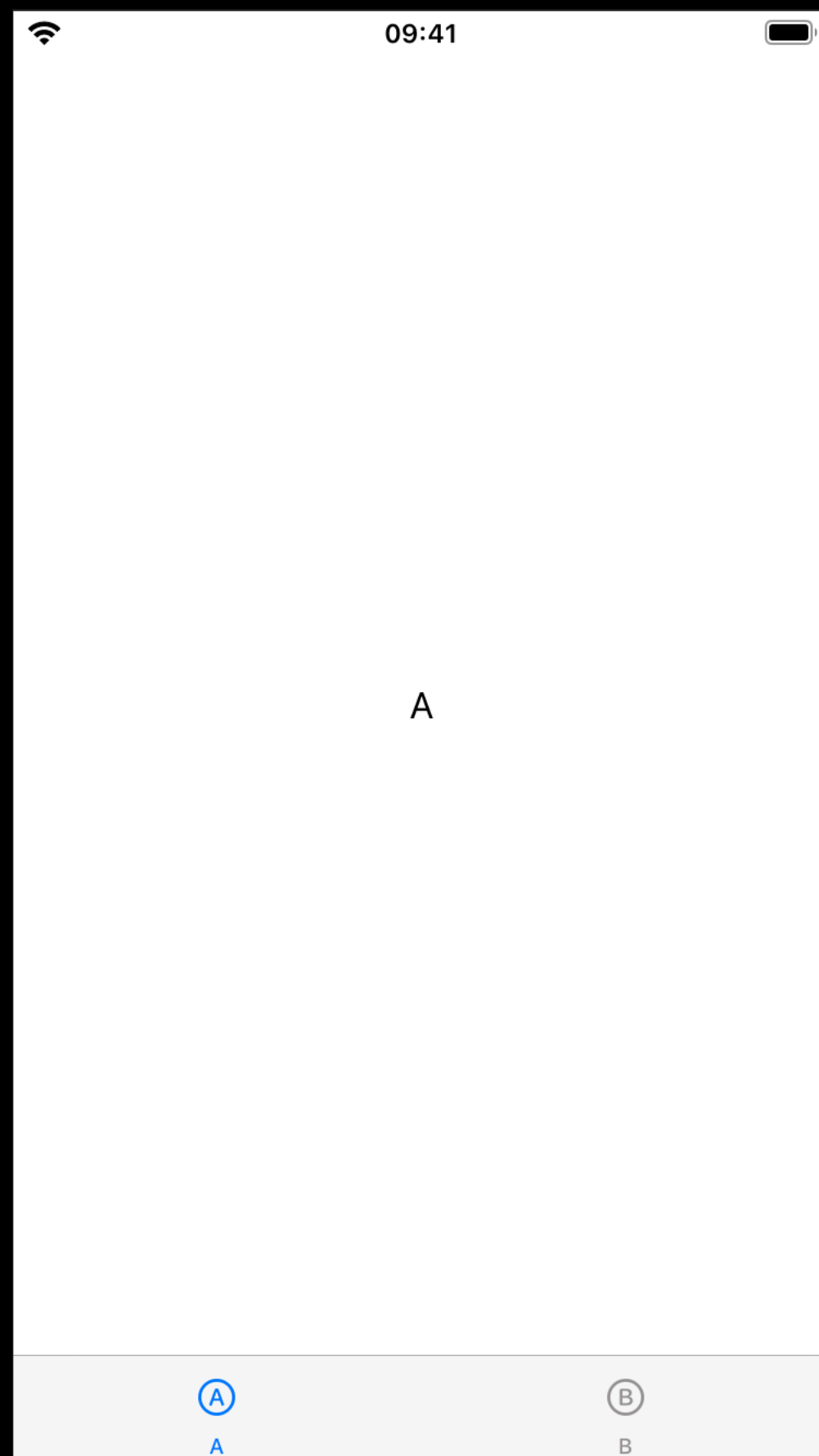
- Une TabView est nécessaire pour ce type de navigation
 - Elle doit contenir les différentes vues à afficher
 - Les vues peuvent avoir un tabItem contenant text et/ou image qui sera utilisé comme titre dans l'onglet


```
struct InitialTabView: View {
    var body: some View {
        TabView {
            Text("A")
                .tabItem {
                    Text("A")
                    Image(systemName: "a.circle")
                }
            Text("B")
                .tabItem {
                    Text("B")
                    Image(systemName: "b.circle")
                }
        }
    }
}
```

```

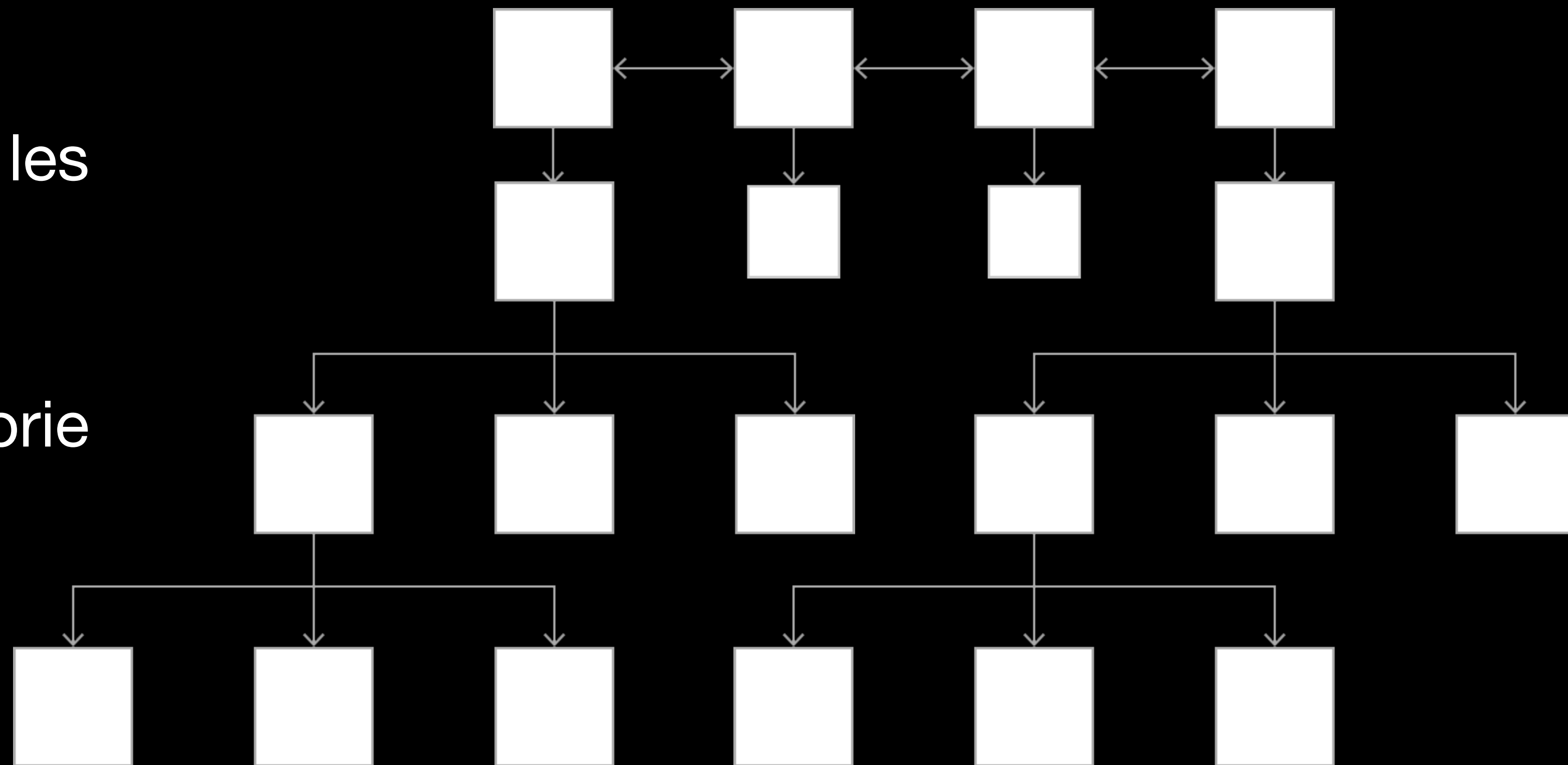
struct InitialTabView: View {
    var body: some View {
        TabView {
            Text("A")
                .tabItem {
                    Text("A")
                    Image(systemName: "a.circle")
                }
            Text("B")
                .tabItem {
                    Text("B")
                    Image(systemName: "b.circle")
                }
        }
    }
}

```



Navigation à plat + hiérarchie

- Il est possible de combiner les types de navigation
- A plat, puis navigation à l'intérieur de chaque catégorie

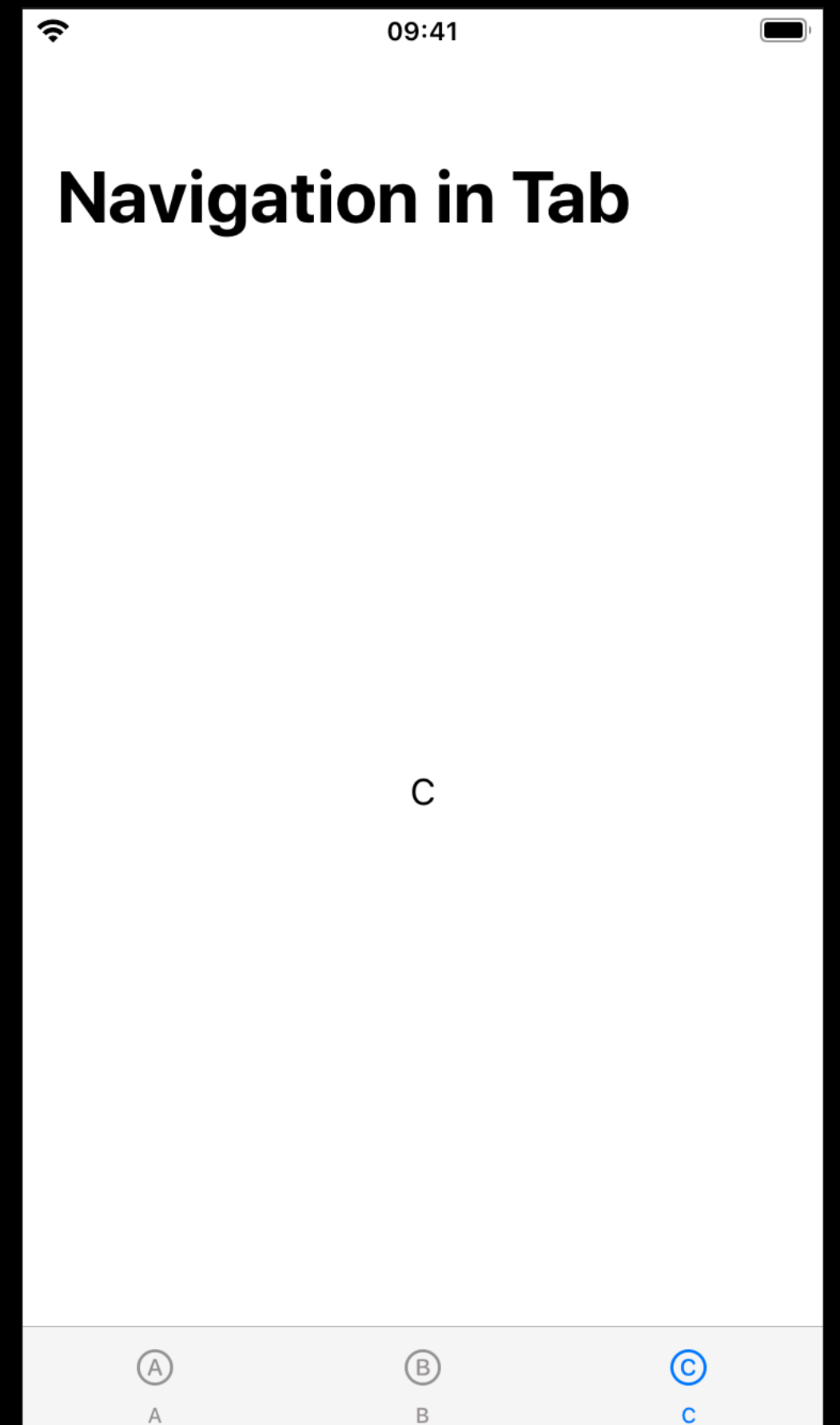


```
struct InitialTabView: View {
    var body: some View {
        TabView {
            Text("A")
                .tabItem {
                    Text("A")
                    Image(systemName: "a.circle")
                }
            Text("B")
                .tabItem {
                    Text("B")
                    Image(systemName: "b.circle")
                }
            NavigationView {
                Text("C")
                .navigationBarTitle("Navigation in Tab")
            }
            .tabItem {
                Text("C")
                Image(systemName: "c.circle")
            }
        }
    }
}
```

```

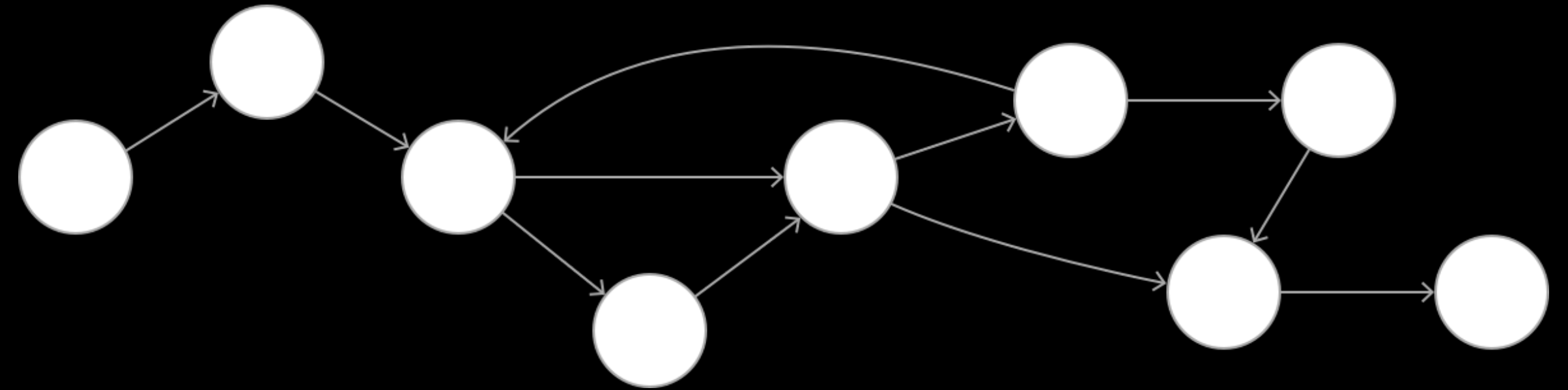
struct InitialTabView: View {
    var body: some View {
        TabView {
            Text("A")
                .tabItem {
                    Text("A")
                    Image(systemName: "a.circle")
                }
            Text("B")
                .tabItem {
                    Text("B")
                    Image(systemName: "b.circle")
                }
            NavigationView {
                Text("C")
                .navigationBarTitle("Navigation in Tab")
            }
                .tabItem {
                    Text("C")
                    Image(systemName: "c.circle")
                }
        }
    }
}

```



Navigation guidée par le contenu

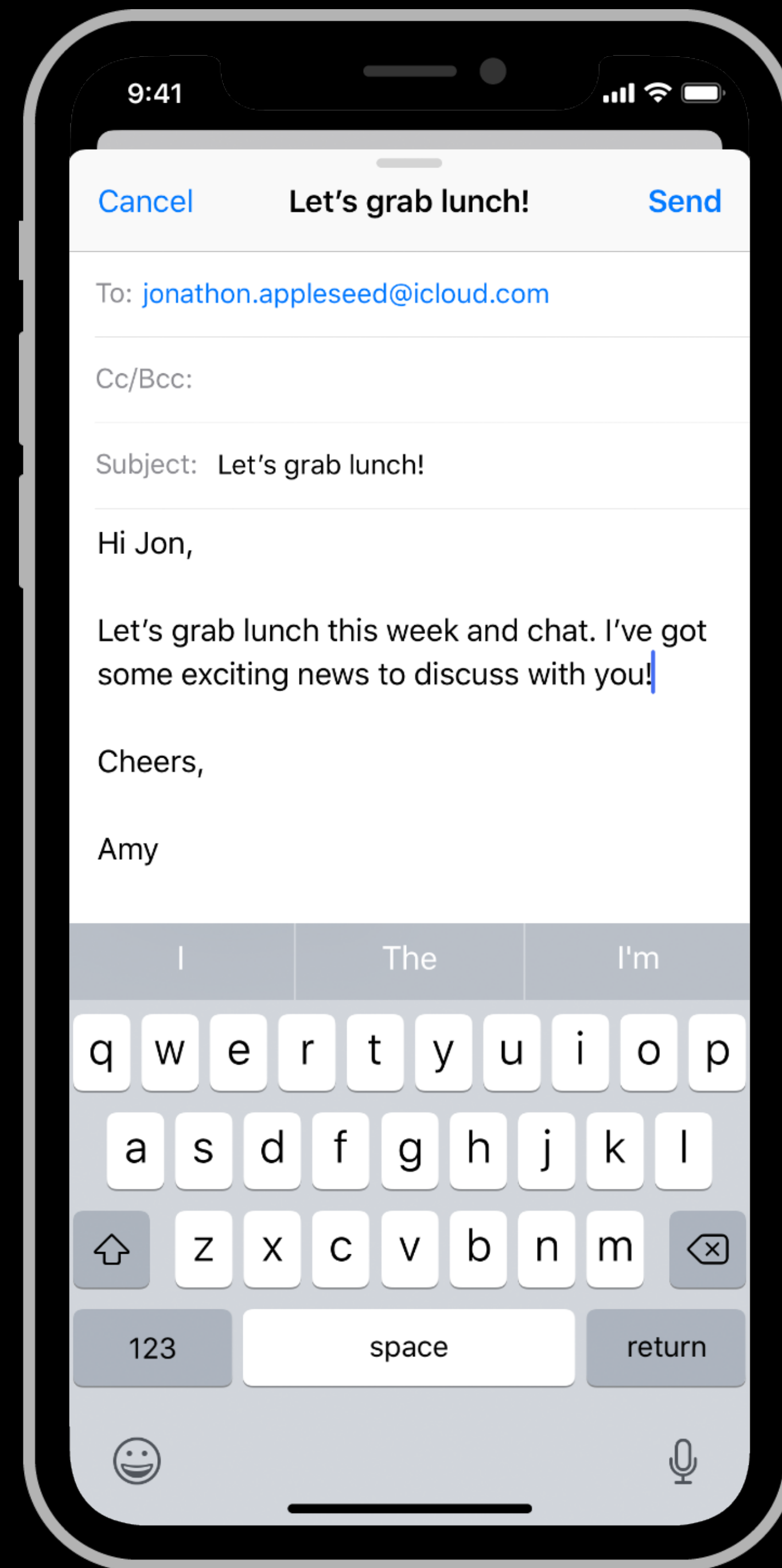
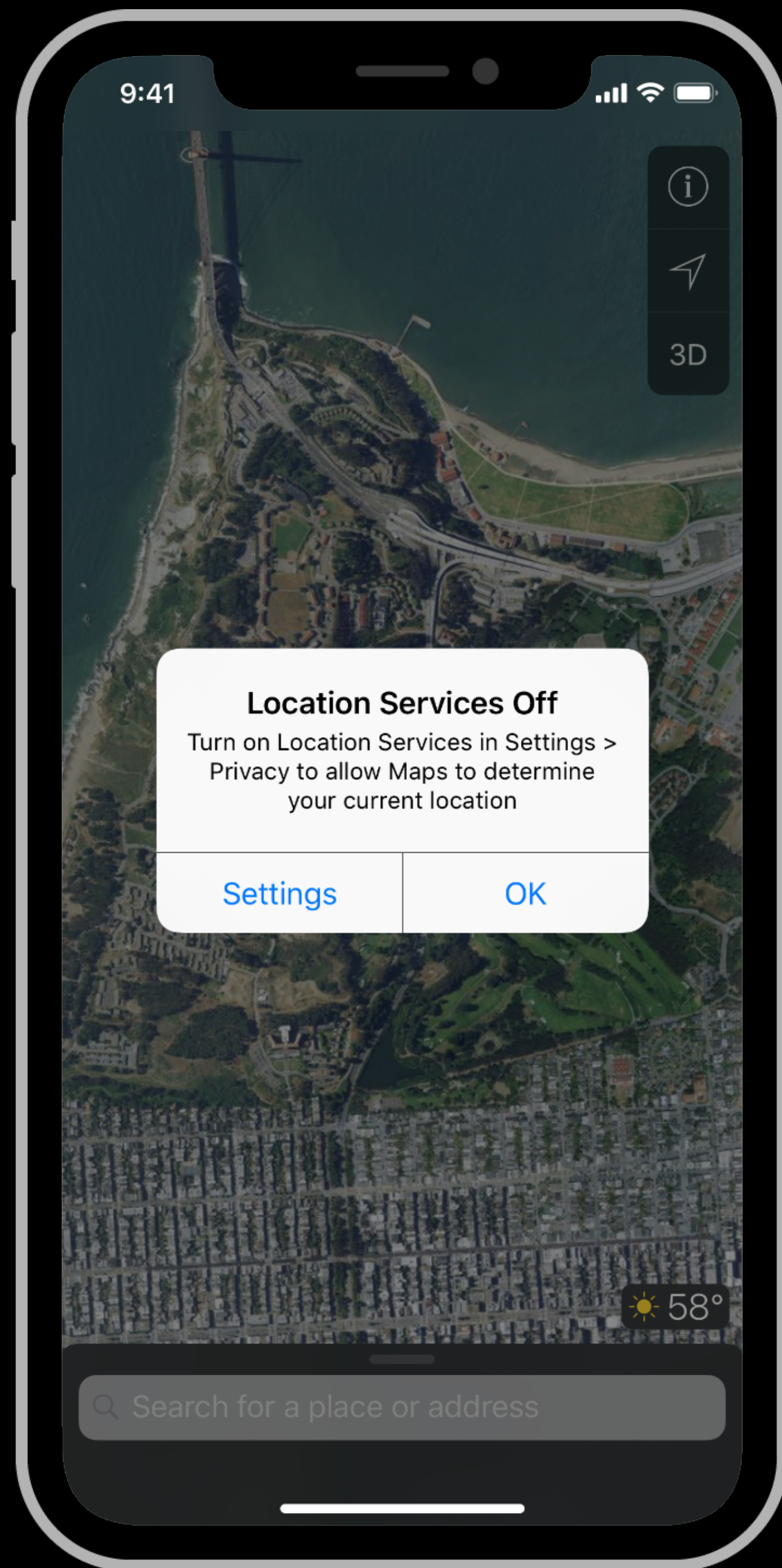
- Navigation libre dans le contenu, ou définie par le contenu
- Jeux, livres, ou autres expérience immersive



Modalité

Modality is a design technique that presents content in a temporary mode that's separate from the user's previous current context and requires an explicit action to exit.

Modality - iOS Human Interface Guidelines - Apple

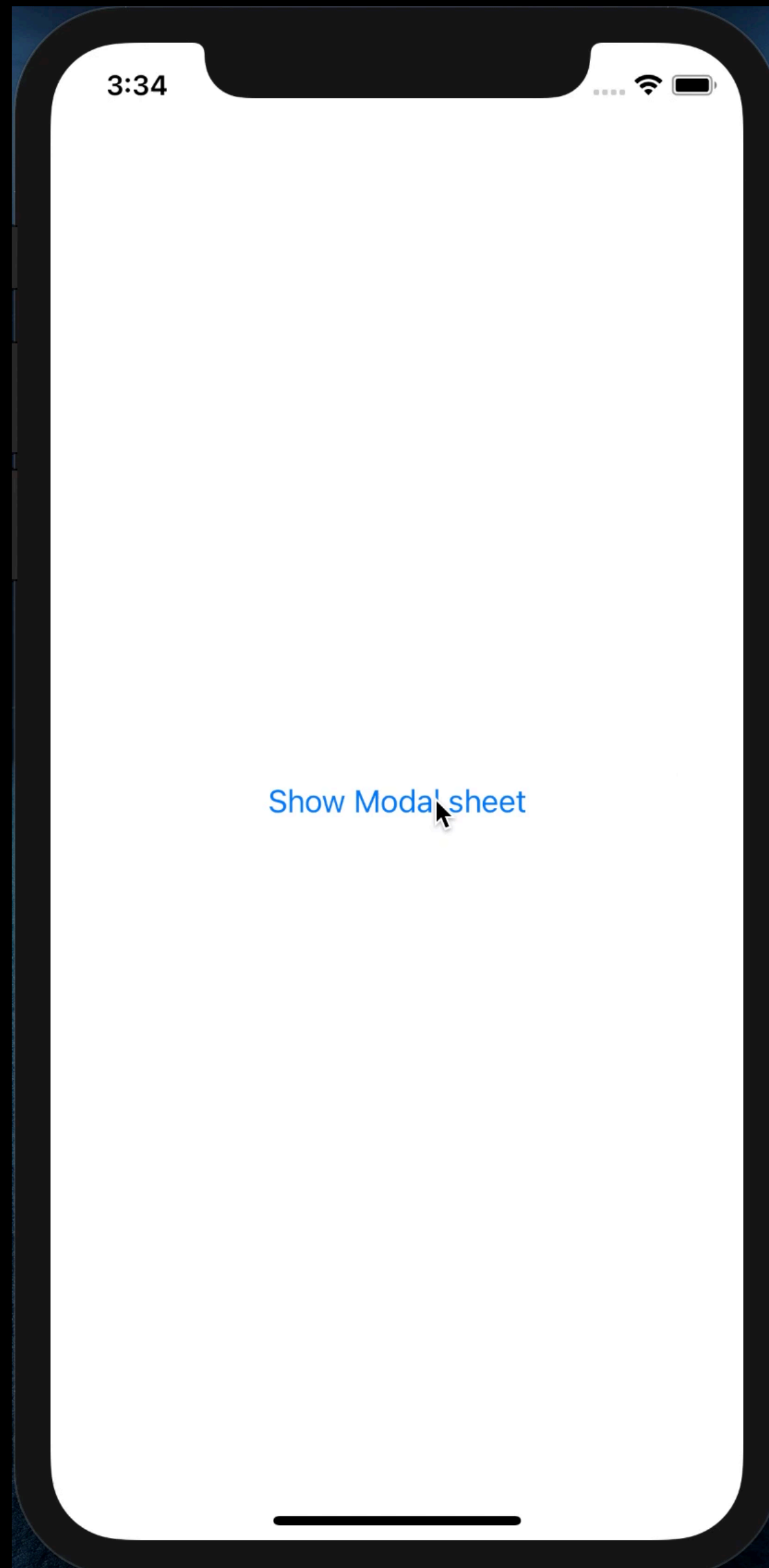


Modalité

- La modalité permet
 - D'aider l'utilisateur à rester concentrer sur une action
 - De s'assurer que l'utilisateur reçoive et agisse sur une information

Modalité

```
struct Modality: View {  
    @State private var isDisplayingSheet = false  
  
    var body: some View {  
        Button("Show Modal sheet") {  
            self.isDisplayingSheet.toggle()  
        }.sheet(isPresented: $isDisplayingSheet) {  
            Text("This is a modal sheet")  
        }  
    }  
}
```



Modalité

```
struct Modality: View {  
    @State private var isDisplayingSheet = false  
  
    var body: some View {  
        Button("Show Modal sheet") {  
            self.isDisplayingSheet.toggle()  
        }.sheet(isPresented: $isDisplayingSheet) {  
            Text("This is a modal sheet")  
        }  
    }  
}
```

Alerte

```
struct Modality: View {  
    @State private var isDisplayingAlert = false  
  
    var body: some View {  
        Button("Show alert") {  
            self.isDisplayingAlert.toggle()  
        }.alert(isPresented: $isDisplayingAlert) {  
            Alert(title: Text("This is an alert"))  
        }  
    }  
}
```


3:41



This is an alert

OK

Alerte

```
struct Modality: View {  
    @State private var isDisplayingAlert = false  
  
    var body: some View {  
        Button("Show alert") {  
            self.isDisplayingAlert.toggle()  
        }.alert(isPresented: $isDisplayingAlert) {  
            Alert(title: Text("This is an alert"))  
        }  
    }  
}
```

Action

```
struct Modality: View {  
    @State private var isDisplayingActionSheet = false  
  
    var body: some View {  
        Button("Show Action sheet") {  
            self.isDisplayingActionSheet.toggle()  
        }.actionSheet(isPresented: $isDisplayingActionSheet) {  
            ActionSheet(title: Text("Action title"), message: Text("Action message"),  
buttons: [.destructive(Text("Destructive action"), action: {  
                }), .default(Text("Default action"), action: {  
                }), .cancel()])  
        }  
    }  
}
```

Action

```
view {  
  
    var isDisplayingActionSheet = false  
  
    View {  
  
        show Action sheet") {  
            isDisplayingActionSheet.toggle()  
            ActionSheet(isPresented: $isDisplayingActionSheet) {  
                ActionSheet(title: Text("Action title"), message: Text("Action message"),  
                    destructive(Text("Destructive action"), action: {  
                        // ...  
                    },  
                    default(Text("Default action"), action: {  
                        // ...  
                    },  
                    cancel()))  
        }  
    }  
}
```

3:42



Show Action sheet

Action title

Action message

Destructive action

Default action

Cancel