Interface Builder

Key takeways

- `Main.storyboard` should have entry point, arrow on the left side of view controller UI component
  - if you expirience black screen that could be one of the reasons
  - also read the console log, usually above the stack trace in case of the crash you will have the name of the error
- Each `UIViewController` in **Storyboards** that you want to modify from code has to have its custom subclass
  - You need to set this subclass from Storyboards
  - You can set this when you select your `UIViewController` in Storyboards
    - View -> Inspectors -> Show identity inspector
- Each `UIView` component in **Storyboards** that you want to modify from code has to have its reference
  - This reference is marked by keyword `@IBOutlet`
  - You can create this by opening and selecting your `UIView` component in **Storyboards** and then opening Assistant Editor (ring like icons)
    - Then you CTRL + Right Touchpad/Mouse click and drag to your code, somewhere inside the `UIViewController` subclass but not inside the functions
    - This should create `@IBOutlet`
    - When you select your `UIView` component, you can inspect its connections (You can use this for both `@IBOutlet` and `IBAction`)
      - View -> Inspectors -> Show Connections Inspector
      - **Referencing Outlets**
- Each `UIView` component in **Storyboards** from which you wish to receive events (e.g. Java -> btn.click, C# -> btn.click += lambda) has to have is events action
  - This reference is marked by keyword `@IBAction`
  - You can create this by opening and selecting your `UIView` component in **Storyboards** and then opening Assistant Editor (ring like icons)
    - Then you CTRL + Right Touchpad/Mouse click and drag to your code, somewhere inside the `UIViewController` subclass but not inside the functions
    - This should create `@IBAction`
    - When you select your `UIView` component, you can inspect its connections (You can use this for both `@IBOutlet` and `IBAction`)
      - View -> Inspectors -> Show Connections Inspector
      - **Send Events**
- Each `UIViewController` is backed by `UIView`
  - You use its view to add other UI components
  - You use its view to change its background color

ARC

- iOS uses ARC - Automatic reference counting
  - **strong** by default
  - **weak** when you need to break retain cycle
    - usually when you have PARENT <-> CHILD
    - usually when you use closures