

Subject: Fundamentals of Swift

Course Code: 216H05C401

Term: Even (2024-25)

Class/Semester: SY/ IV

Course Outcomes

Course Outcome	After successful completion of the course students should be able to
CO1	Demonstrate a clear understanding of the Swift programming language and its syntax.
CO2	Implement Swift protocols, functions, and extensions for advanced app development.
CO3	Implement Swift object-oriented programming, including classes, type casting, and generics.
CO4	Apply advanced Swift concepts, including JSON, operators, closures, and concurrency.
CO5	Develop efficient Swift applications with RxSwift, caching, encryption, and performance.

List of Experiments

Sr. No	Experiment Title	CO Mapped
1.	Study and Implementation of Swift Basics	CO1
2.	Study and Implementation of Collections in Swift – Array, Set, Tuples, Dictionaries	CO1
3.	Study and Implementation of Interface Builder Basics using UILabel, UIButton, UIImageView, Gestures - Coin Flip / Dice Throw App - Traffic Light System	CO2
4.	Study and Implementation of Swift UI Components – UISwitch, UISlider, UITextField, UIView - Interactive Color Picker App	CO2
5.	Study and Implementation of AutoLayout in StoryBoard. - User SignIn and Login Page	CO2
6.	Study and Implementation of StackViews in StoryBoard. - Horizontal and Vertical StackViews	CO2
7.	Study and Implementation of Navigation in iOS - Show and Modal Segue - Programmatic Segue - Passing Data	CO2
8.	Read and write JSON files using Codable Protocol.	CO4

Faculty In-charge:

Prof. Swapnil Pawar, Prof. Gopal Sonune