The builder pattern consists of a
* builder interface,
* a director to control the creation process,
* and concrete builders based on the builder interface to produce specific products.

IBuilder

- membername

+ Reset()

+ buildStep1()

+ buildStep2()

+ buildStep20()

Director

- builder: IBuilder

+ Director (IBuilder)

+ ChangeBuilder (IBuilder)

+ Make (type)

ConcreateBuilderA

- membername

+ Reset()

+ buildStep1()

+ buildStep2()

+ buildStep20()

+ getProduct():ProductA

ConcreateBuilderB

- membername

+ Reset()

+ buildStep1()

+ buildStep2()

+ buildStep20()

+ getProduct():ProductB

Client

Properties Here

Methods Here

ProductA

Properties Here

Methods Here

ProductB

Properties Here

Methods Here

IBicycleBuilder

- membername

+ Reset()

+ buildStep1()

+ buildStep2()

+ buildStep20()

Director

- builder: IBuilder

+ Director (IBuilder)

+ ChangeBuilder (IBuilder)

+ Make (type)

RoadBikeBuilder

- membername

+ Reset()

+ buildStep1()

+ buildStep2()

+ buildStep20()

+ getProduct():ProductA

MountainBikeBuilder

- membername

+ Reset()

+ buildStep1()

+ buildStep2()

+ buildStep20()

+ getProduct():ProductB

Program.cs

Properties Here

Methods Here

Hillcrest

Properties Here

Methods Here

Palo Duro Canyon Ranger

Properties Here

Methods Here

Program.cs

Properties Here

Methods Here

Director

- builder: IBicycleBuilder

+ Director (IBicycleBuilder)

+ ChangeBuilder (IBicycleBuilder)

+ IBicycleProduct Make

IBicycleBuilder

- Properties

- void Reset()
- void BuildFrame()
- void BuildHandleBars()
- void BuildSeat()
- void BuildSuspension()
- void BuildDriveTrain()
- void BuildBrakes()

- IBicycleProduct GetProduct()

Product

IBicycleProduct

- IBikeBrakes Brakes
- IBikeDrivetrain Drivetrain
- IBikeFrame Frame
- IBikeHandlebars Handlebars
- IBikeSeats Seat
- IBikeSuspension Suspension

- override ToString()

BicycleProduct

- IBikeBrakes Brakes
- IBikeDrivetrain Drivetrain
- IBikeFrame Frame
- IBikeHandlebars Handlebars
- IBikeSeats Seat
- IBikeSuspension Suspension

- override ToString()

BuilderCruiseBike	BuilderMountainBike	BuilderRecumbentBike	BuilderRoadBike
- member BicycleProduct _bicycle	- member BicycleProduct _bicycle	- member BicycleProduct _bicycle	- member BicycleProduct _bicycle
- void Reset()	- void Reset()	- void Reset()	- void Reset()
- void BuildFrame()	- void BuildFrame()	- void BuildFrame()	- void BuildFrame()
- void BuildHandleBars()	- void BuildHandleBars()	- void BuildHandleBars()	- void BuildHandleBars()
- void BuildSeat()	- void BuildSeat()	- void BuildSeat()	- void BuildSeat()
- void BuildSuspension()	- void BuildSuspension()	- void BuildSuspension()	- void BuildSuspension()
- void BuildDriveTrain()	- void BuildDriveTrain()	- void BuildDriveTrain()	- void BuildDriveTrain()
- void BuildBrakes()	- void BuildBrakes()	- void BuildBrakes()	- void BuildBrakes()
- IBicycleProduct GetProduct()	- IBicycleProduct GetProduct()	- IBicycleProduct GetProduct()	- IBicycleProduct GetProduct()

Components

IBikeBrake

- Properties

IBikeDriveTrain

- Properties

IBikeFrame

- Properties

IBikeHandlebars

- Properties

IBikeSeat

- Properties

IBikeSuspension

- Properties

AbstractBikeBrakes

- Properties

- override ToString()

AbstractBikeDriveTrain

- Properties

- override ToString()

AbstractBikeFrame

- Properties

- override ToString()

AbstractBikeHandleBars

- Properties

- override ToString()

AbstractBikeSeat

- Properties

- override ToString()

AbstractBikeSuspension

- Properties

- override ToString()

BrakeType Caliper	DriveTrain Cruiser	Frame Cruiser	Handlebars Cruiser	Seat Cruiser	Suspension Front
- Constructor()	- Constructor()	- Constructor()	- Constructor()	- Constructor()	- Constructor()

BrakeType Coaster	DriveTrain Mountain	Frame Mountain	Handlebars Mountain	Seat Generic	Suspension Full
- Constructor()	- Constructor()	- Constructor()	- Constructor()	- Constructor()	- Constructor()

BrakeType Disc	DriveTrain Recumbent	Frame Recumbent	Handlebars Recumbent	Seat Recumbent	Suspension HardTail
- Constructor()	- Constructor()	- Constructor()	- Constructor()	- Constructor()	- Constructor()

DriveTrain Road	Frame Road	Handlebars Road
- Constructor()	- Constructor()	- Constructor()