# Angular Training Course Content

* Introduction
  + Angular Introduction
  + Single Page application SPA
  + Introduction to development environment
  + Introduction to Node.js and NPM
* Environment Setup
  + Node.js
  + HTTP Restful api server for workshop
  + Visual studio code IDE
* Angular-cli
  + Setup of angular-cli
  + Create basic project structure with angular-cli
  + How angular bootstrap process works
  + Introduction of all angular-cli commands
  + How to add third party libraries i.e. Bootstrap
  + Exercise:
    - Create <cli-demo> project by using angular-cli.
    - Create components
    - Create Services
    - Create module
    - Create class
    - Add bootstap library
    - Launch application by using
* Introduction of TypeScript
* Introduction of components
  + Create component with angular-cli
  + Component selector
  + Component templates
  + Component Styles
  + Access component into another component
  + Get data into component through Input
  + Subscribing to components events through Output
  + Component Life Cycle
* Data Binding
  + Interpolation
  + Property binding
  + Event binding
  + ngModel
* Directive
  + Attribute Directive (ngStyle, ngClass)
  + Structure directive (\*ngIf, \*ngFor, \*ngSwitch)
* Forms
  + Template driven approach
  + Reactive approach
    - Form Control
    - Form Group
    - Form Builder
    - Validator
  + Validation
* Services
  + Introduction
  + Service Dependency
  + Dependency Injection
  + Injectable Decorators
  + Provider Definition
  + Singleton vs multiple service instance
* Http
  + Introduction
  + Dependency Injection of Http service
  + Http CRUD operation: Create, Read, Update and Delete
* Pipes
  + Pipes Introduction
  + Built in pipes (Currency, Date, Number, Percentage, JSON)
  + Creating custom pipes
  + Passing argument to pipes
  + Registering pipes
  + Chaining Pipes
  + Http web service call with Pipes
  + Async pipes
  + Handling Promises in pipes
* Rxjs
  + Introduction to Reactive extension Library (RxJs)
  + What are Observables
  + Subscription
  + Events: map
  + Streaming in Observable
  + Cancellable Observable
* Routing
  + Introduction to Single Page Application SPA
  + Route Introduction
  + Configuring Routes
  + Linking Routes
  + Redirection
  + Router Outlet
  + Nested Routes
  + Lazy loading
  + Passing values parameters between routes
  + Can Activate Guard
  + Can deactivate Guard
* Unit Testing
  + Introduction to Test Driven Development (TDD approach)
  + Introduction to Jasmine and Karma
  + Jasmine Test suites, Specs and Expectations
  + Testing Component
  + Testing Service
  + Testing with HTTP
  + Mocking HTTP Service
  + Testing Pipes
* Internationalization
* Angular Security
  + Cross Origin Request
  + CORS Header Introduction
* Advanced Topics
  + Build process
  + Ahead of Time compilation
  + Just in time compilation
  + Authentication and Authorization
    - JWT token based authentication
    - Storing tokens into html storage
    - Authorization with angular (Can activate route/ Can deactivate route)