



# Angular CLI & Nrwl Nx extension

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# Angular CLI & Nrwl Nx extension Outline

- Introduction to Angular CLI
  - Important commands
- Introduction to Nrwl Nx extension
  - Basic setup and generators



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# Introduction Angular CLI – I

- `npm i @angular/cli`, then „ng“ → not possible use „npx ng“
- Used to initialize, develop, scaffold and maintain NG apps (and libs)

# Introduction Angular CLI – II

- `ng / ng help`
- `ng new cli-project, cd cli-project, ng serve (s)`
- Workspace and project configuration in “angular.json”

# Important commands (angular.io/cli)

- ng build (b)
- ng lint (l) or test (t) or ng e2e (e)
- ng generate (g) component/service/... (based on schematics)
- ng update → updating your angular version ([update.angular.io](https://update.angular.io))



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# Introduction Nrwl Nx – I

- Nx is a suite of dev tools that help
  - develop
  - test
  - build (and cache!) and
  - scale Angular applications
- The Nx CLI wraps the Angular CLI seamlessly
  - It extends the CLI tooling and functionality
- Nx works especially well for monorepos (i.e. YOU!)

# Introduction Nrwl Nx – II

- Support for leading modern libs
  - Jest & Cypress (instead of Karma & Protractor) & Storybook
  - ESLint (introduced as new standard in NG 11)
  - NgRx (our recommendation for state management)

# Nx Basic Setup

- From scratch
  - `npx create-nx-workspace --preset=angular`
- Just enhance existing NG cli-project (by using Nx caching)
  - `npx make-angular-cli-faster`
- Dive into Nx for existing cli-projects
  - `ng add @nrwl/workspace`



# Nx Generators

- Plugin generators (shipped with Nx, e.g. NgRx generators)
  - `nx generate [plugin]:[generator-name] [options]`
  - <https://nx.dev/latest/angular/core-concepts/nx-devkit>
- Custom workspace generators (with schematics)
  - `nx generate workspace-generator my-generator`
  - `nx workspace-generator my-generator`
  - [javascript.plainenglish.io/how-to-build-generators-schematics-with-the-superior-nx-devkit-689d8f529fa6](https://javascript.plainenglish.io/how-to-build-generators-schematics-with-the-superior-nx-devkit-689d8f529fa6)
- Update generators
  - For updating Nx itself (like ng update)
  - `nx migrate latest`