DotVVM 3.0 and beyond

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What's new
in DotVVM 3.0

JS Directive

- Allows to interact with DotVVM in JavaScript code

- Use cases
  - Client-side changes to the viewmodel
  - Calling custom APIs
  - Integration with 3rd party components and libraries

- `@js FeatureSamples_Resources_Incrementer`

JS Directive

- JavaScript file must **export default function**
  - Receives the **context** argument
    - `context.namedCommands.MethodName`
      - Allows to call DotVVM commands and static commands
      - `<dot:NamedCommand Name="MyMethod"`
        `Command="{command: ...}" />`

  - Should return **object with methods**
    - They can be called from DotVVM
      - `{staticCommand: _js.Invoke("MethodInModule", args...)}`

DEMO

JS Directive

Typed viewmodels & Immutable state

- State is persisted in a plain JS object
  - Immutable – every change replaces parts of the object

  - `dotvvm.state` – returns the current state snapshot
  - `dotvvm.patchState(…)` – preferred way to update the state

- Knockout observables are just a façade
- Assignments from JS are validated
  - Value can be coerced to the correct type, or you get exception

DOTVVM

DEMO

Typed viewmodels

LINQ and lambda expressions

🌿 Lambda expressions in data-bindings

  🌿 No type inference yet – you need to specify argument types

  🌿 `{value: Customers.Where(`
     `            (CustomerData c) => …)`
     `}`

🌿 `Where, OrderBy, Count, Any, All, Select…`

Other improvements

- Complete rewrite of the TypeScript part of DotVVM
  - ES6 modules, `rollup` for bundling, polyfills for IE 11...

- Refactoring of the postback pipeline

- New events in `dotvvm.events` with more information

DOTVVM

How to try

🌿 DotVVM 3.0 Preview will be published
by the end of the week

🌿 JS Directive sample
  🌿 https://github.com/riganti/dotvvm-samples-js-integration

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What's next

- Type inference in lambdas

- GridViewDataSet extensibility
    - Different types of paging, sorting and filtering
    - Different loading providers (static command, REST API…)

- Easier way to write custom controls

DOTVVM

Resources

🍃 Homepage
dotvvm.com

🍃 Documentation
dotvvm.com/docs

🍃 GitHub repo
github.com/riganti/dotvvm

Q&A