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## What is NgRx?

NgRx is a collection of open-source libraries used to help scale performance and manage complexity in Angular applications.







## "Complexity is the single major difficulty in the successful development of large-scale software"

Out of the Tarpit - White Paper





## "Major contributor to this complexity is primarily state along with code volume and complex control flow"

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## What is "state"?

Data that changes over time as the application runs.

Anyone who has ever been in the following situations has encountered a problem with state management.

- "Try it again"
- "Refresh the page"
- "Clear the cache"

- "Try turning it off and on again"
- "Re-install the app"





## How does NgRx handle state?

Using NgRx, state and UI are separated and well-defined, making it easier for robust state management testing.







## What is "control flow"?

Control flow is the order of execution in an application.

Applications that have unclear control flow are harder to change and are prone to nefarious race condition bugs.





## How does NgRx handle control flow?

With NgRx, developers can write small, well-defined modules of code that handle individual responsibilities in the control flow of an application.







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### What is "code volume"?

### How many lines of code it takes to achieve a task.

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## How does NgRx handle code volume?

Though NgRx does increase code volume, it provides an effective way to manage state and control flow.

Code volume will have more of an impact on smaller teams than bigger teams, however, large applications that already have a high code volume will see tremendous benefits from using NgRx.







## Getting started with NgRx

It is recommended that organizations bring in an outside expert to help identify architectural considerations and establish a clear path for developers to get comfortable using NgRx.

Applications must be on the latest version of Angular.





### Additional resources

NGRX.IO - Read "Getting Started Guide" and gain access to other training content.

NgRx Conf - Attend to learn directly from experts, take workshops, and hear from community leaders on best practices.



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