

## **GraphQL training (duration: 3 days)**

**Note:** deep understanding of Javascript, node.js is required.

- 
- Introduction
  - Demand Driven Architecture vs REST
  - GraphQL and Relay
- Making GraphQL Requests
  - Using GraphiQL to send queries
  - Defining Queries
  - Understanding Types
  - Specifying Query Parameters
  - Understanding Fragments
  - Using Query Variables
  - Under the Hood: How a GraphQL Server Responds to Queries
- Relay Concepts
  - Containers, Fragments, Root Container and Routes
  - Internal Architecture & Client-Side Cache
- Getting Started with Relay
  - Relay Container Composition
  - Naming Fragments and Variables
  - Passing Variables to Fragments
  - Setting and Using Relay Variables
  - Conditional Fields with `include` and `skip`
  - Debugging Network Requests
  - Render Callbacks
- Slicing and Paginating
  - Relay Support in GraphQL: Cursors, Slicing and Paginating Data using Connections
  - Relay Support in GraphQL: Edges and PageInfo
  - Navigating/Paginating one-to-many relationships
- Querying via Relay
  - Re-fetching, the Node Interface, and Global 'id's
  - The Node root field
  - Thinking in Graphs
- Data Fetching
  - Data fetching & Ready State
  - Using Ready State Events
  - Handling Server Errors
  - Force Fetching
- Mutations
  - Relay's Mutation Pattern
  - Handling Mutations
  - Optimistic Updates and Fat Queries
  - Mutator Configurations & Updating the Client Store
  - Range Behaviors
  - Mutations for: adding an item, changing an item, deleting an item