**RoutWise App – Developer Note**

This app is used to find the shortest path from node graph with two nodes. There are 3 apps,

1. API app – Calculate shortest path from the provided nodes or predefine nodes
2. UI app – To facilitate user to do the finding node paths and see the result
3. Console app – To fid the shortest path using console app without a proper UI

**UI APP**

App loading screen,

A screenshot of a computer

Description automatically generated

Users can select the start node and end node from the dropdowns, then click the calculate button and see the result with the path highlighter as below,

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**API APP**

API app has two endpoints to get graph nodes and find the short path, the node graphs store nodes in config JSON. If user does not provide node graph the default one will be loaded from configs – Mocking.

Get graph nodes

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Find a shortest path – Without providing graph nodes

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Description automatically generated

Find a path with an invalid node,

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Description automatically generated

**CONSOLE APP**

This app provides an easy way to find the path,

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**TESTER APP**

This shows the unit testing result for find path logic,

1. Should Return ShortestPath When Valid Request Is Provided
2. Should Return ShortestPath When Invalid Request Is Provided

