# Decision Analysis Report - React Router

Project Name: Tresearch

Application Type: Web Application

Trial By Fire
Ian Ho-Sing-Loy
Jessie Lazo
Matthew Chen (Team Lead)
Pammy Poor
Ryan Harrison
Viet Nguyen

Instructor: Vatanak Vong

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## **Purpose**

The purpose of this document is to recommend a react component library to route paths. This allows for navigation among views.

# **Technology Comparisons**

- React-router
  - React component library routing solution
- React-router-dom
  - Re-exports react-router's exports but includes DOM-aware components. Most recommend react-router-dom when creating applications on a browser.
- Wouter
  - React component library routing solution

### **Metrics**

- Render speed
  - o The time required to compile and initialize a server with 100 routes
- History of Urls
  - Want to be able to keep URLs in memory. To be used when the user is logged out and to return to the previous page.
- Versions within the last year
  - On average, how often does a framework or API update? We want to use a framework or API that is kept up to date but not too frequently.

	react-router	react-router-dom	Wouter
Render speed (1)	43s (0.75)	40s (1)	52s (0.5)
URL History (0.75)	Yes, using <memoryrouter> (1)</memoryrouter>	Yes using <memoryrouter> (1)</memoryrouter>	No (0)
Versions within the 2 years (0.5)	28 (0.75)	30 (0.70)	17 (1)
Total	1.875	2.1	1

### **DAR Recommendation**

Based on the scores of the DAR, it is clear that react-router-dom should be recommended based on the fact that its render speed far outpaced the others as well as the higher score.