**ADR 3: Selection of Backend Language**

**Context**

Team must decide on the backend language for developing the server components and logic for modern transportation mobile app. Factors such as performance, developer expertise and ecosystem should be considered. The selected language should offer features for building scalable and efficient server-side application. Team should also consider their expertise and familiarity with the chosen language.

**Decision**

We will go with JavaScript using Node.js and Express.js as the backend language and framework for developing the components of mobile app.

**Rationale**

Node.js is a popular and widely adopted JavaScript runtime that offers event-driven architecture to users that makes it widely suited for building real time applications.

The team has extensive expertise in JavaScript making node.js and express.js a natural choice for backend development. This will ensure efficient development and allows for rapid iteration and prototyping.

**Rejected alternatives:**

**Java:** While java offers strong performance and scalability, it may require deeper learning curve compared to node.js.

**Python:** python is known for its compatibility, simplicity but it may not offer the same level of performance as node.js for real time application.

**Status**

Accepted

**Consequences**

**Performance and Scalability:** Both Node.js and Express.js provides a scalable and efficient backend solution, capable of handling real-time updates in mobile app.

**Developer Efficiency:** As JavaScript can be used for both frontend and backend development, it allows better collaboration between both teams.

**Ecosystem Support:** Node.js has a large and active ecosystem with a wealth of libraries and modules, facilitating rapid development and integration of third-party services.