

# Building a Better User Query Management System

## Technology Choices: TruDesk, Node.js, and MongoDB

Viswanatha Kartha V

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# Why TruDesk?

- TruDesk serves as a solid foundation for ticket management.
- Provides a feature-rich platform, saving development time.
- Customizable UI ensures a seamless user experience.
- Active community support for issue resolution and updates.
- Allows us to focus on extending functionality rather than building from scratch.

# Why Node.js?

- Node.js offers a non-blocking, event-driven architecture.
- Well-suited for real-time applications like our query management system.
- Extensive npm package ecosystem for rapid development.
- JavaScript on both the client and server simplifies code consistency.
- Large and active developer community for ongoing support and collaboration.

# Why MongoDB?

- MongoDB's flexible document-oriented data model is ideal for our dynamic content.
- Scalability and performance in handling large amounts of data.
- Schema-less design allows for easy modifications as the project evolves.
- Native support for JSON-like documents aligns well with JavaScript development.
- Active community and robust documentation ensure easy troubleshooting.

# Language Choice

- Considered alternatives like PHP, Ruby, and Perl, but found them less popular.
- Chose Node.js for its growing popularity and extensive community support.
- Node.js facilitates easy collaboration and attracts a wider pool of contributors.
- Using JavaScript across the stack minimizes the learning curve for future contributors.

# Extensibility and Future Contributions

- Node.js and TruDesk's extensibility make future contributions easier.
- A well-supported language like JavaScript ensures a broader developer base.
- Future contributors can quickly understand and extend the project.
- The combination of TruDesk, Node.js, and MongoDB sets the stage for a scalable and collaborative project.

# Conclusion

- TruDesk, Node.js, and MongoDB form a powerful trio for our User Query Management System.
- The chosen technologies align with our goals of scalability, extensibility, and community support.
- This strategic tech stack ensures a robust and maintainable project for the present and future.

# References

- TruDesk Official Website: <https://trudesk.io/>
- TruDesk GitHub Repository:  
<https://github.com/polonel/trudesk>