



VocalCart

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Motivation

- Enhanced user experience.
- Complex and Ineffective Search Queries
- Limited Accessibility for user with disabilities.
- Time-Consuming Manual Browsing
- Missed Sales Due to Lack of Personalization



Solution

- NLP for semantic search.
- Voice Recognition and Speech-to-Text.
- Use of cloud services to host distributed application.
- Web-based application.
- Multi-user.



Conceptualization and Justification

Concept: Voice-based semantic search improves product discovery by allowing users to express queries naturally, using NLP and AI to understand intent beyond keywords, enabling more relevant, personalized, and context-aware results.

Justification: Voice-driven semantic search enhances accuracy and user experience by understanding intent better than keyword-based search, enabling more relevant results and natural interactions.



Current Market Offerings

- **Available Tools**
 - Amazon Alexa
 - Google assistant
 - eBay voice search
- **Limitations**
 - Limited context understanding
 - Inaccurate product search and recommendation



Target Market and Value Propositions

- For users with limited time to search and browse through categories.
- For individuals less familiar with digital interfaces, the platform offers a user-friendly e-commerce experience.
- AI powered semantic search based on user preferences.
- User can find products effortlessly through voice-based search.



Business Model

- **Commission-Based:** Partner with brands and retailers and earn commission for selling their products.
- **Advertisement-Based:** Sponsored banners and advertisements, generating revenue through featured items.



Team Expertise and Contributions

- **Raj Oli:** Full stack Development, Machine Learning, API integration
- **Sindhu Aryal:** Full stack development, Databases, Docker
- **Suyog Dhakal:** Natural Language Processing, Front end development, Cloud deployment



Collaborative Tools

- GitHub
- Google Apps
- Microsoft Office 365



References

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