

Eureka!

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Target Audience

This app is designed for high school students who want to deepen their conceptual understanding of physics through interactive and engaging learning experiences.

Key Features (MVP)

- Home page
- Topics page which links to each topic page
- One lesson completed
- Interactive simulations
- Quiz-style learning

Future Work

- Finish the physics curriculum with other topic pages
- Add more online labs and simulations for each unit
- Complete the awards and settings page

Motivation

Many high school students struggle with physics not because of a lack of interest, but because traditional teaching methods often relies heavily on memorization rather than true understanding. By offering interactive simulations and concept-driven explanations that focus on the foundations, we aim to help students build a deeper, intuitive grasp of core physics principles.

Architecture

React+JSX components

Tailwind CSS UI

React Router Navigation (Home, Settings, Topics)

Interactive Simulations (Distance vs Displacement, Projectile Motion)

KaTeX Equation Rendering (formatting physics equations)

User Interface

Technologies







