

## Case Study

# Developing Interactive Learning Tools to Enhance STEM Education

Magic  
EdTech

### The Client

The client is a non-profit organization that provides simulated space missions for middle school students, creating educational experiences designed to inspire future careers in STEM.

### The Challenge

The client wanted to integrate interactive educational tools into their LMS. They were looking for a partner that could efficiently develop these tools and integrate seamlessly with their existing platform, while leveraging expertise in engineering, user experience, and quality assurance.

### Critical Success Parameters

- ✓ Ensure platform compatibility with the client's existing CMS and hardware.
- ✓ Maintain regular communication with the client's team and SMEs.
- ✓ Establish a feedback loop with iterative reviews (alpha, beta, gold) to address issues early in the development process.
- ✓ Implement a rigorous QA process for functionality and usability testing.
- ✓ Develop a detailed project plan to ensure timely delivery.
- ✓ Provide thorough documentation, including API specifications and integration guidelines.

### Our Approach

- ✓ Designed and developed 63 educational tools based on 39 templates using HTML5 and ReactJS.
- ✓ Created templates and functional specifications based on detailed storyboards.
- ✓ Collaborated with SMEs to ensure the tools met educational objectives.
- ✓ Adopted an agile development methodology, leveraging SCRUM-based workflows with weekly sprints.
- ✓ Designed reusable components for customizable educational experiences.
- ✓ Packaged and tested HTML5 tools for deployment, ensuring they were integration-ready for the client's LMS.
- ✓ Developed wireframes and screen designs to guide the development process.
- ✓ Delivered complete documentation on the tools, including integration and usage guidelines.

For more details, visit: [www.magicedtech.com](http://www.magicedtech.com)



### Key Result Highlights

Successfully developed **63** educational tools with varying complexity.

Tools were fully integrated into the client's LMS and ready for deployment.

Met all development milestones on a tight schedule.

Early and ongoing communication minimized rework and ensured prompt issue resolution.

Agile methodology provided flexibility, allowing quick adaptation to changing requirements and feedback.

Enhanced interactivity and engagement for students