



# CASE STUDY

KIDZANIA Mahindra Life Space  
Township Building studio



**TILT LABS**  
A PRODUCT REALIZATION COMPANY



# EXECUTIVE SUMMARY

Kidzania sought to create an educational and entertaining 3D simulation for children to develop their sustainable township. Kids can choose from various building types and amenities to construct a complete Mahindra Life Space community, evaluating design choices and efficiency. The touchscreen experience spans 11 activity stages that test skills from planning to finalization.





# PROJECT CHALLENGES



## Developing Age-Appropriate 3D Modeling Interactivity for 6+ Years

Balancing complexity with usability ensures children can engage with the simulation effectively without becoming overwhelmed by technical intricacies.



## Balancing Engaging Gameplay with Educational Content

Striking the right balance between fun and educational value to keep children entertained while also delivering meaningful lessons in urban design and sustainability.



## Performance Optimization for Real-Time 3D on Target Hardware

Optimizing the simulation to run smoothly on the designated hardware, ensuring a seamless user experience without sacrificing visual quality or interactivity.



## Meaningful Progress Tracking and Skills Measurement

Implement mechanisms to track children's progress accurately throughout the simulation, provide feedback on their design choices, and evaluate their understanding of sustainability concepts.





# GOALS & OBJECTIVES

## **Teach Children About Urban Design and Sustainability**

Educate children about urban planning principles, sustainable development, and environmentally friendly practices through interactive gameplay and hands-on experiences.

## **Encourage Critical Thinking Through Choice Consequences**

Foster critical thinking skills by presenting children with choices in designing their township and showcasing the consequences of their decisions on the environment and community's well-being.

## **Promote Mahindra's Brand Values Around Green Technology**

Align the simulation with Mahindra's commitment to sustainability and green technology, promoting the brand's values and initiatives to a young audience engagingly and memorably.

## **Captivate Audience Attention to Drive Return Visits**

Create an immersive and entertaining experience that captivates children's attention and leaves a lasting impression, encouraging them to revisit the simulation and further engage with the educational content.



# SOLUTIONS & METHODOLOGY

## **Intuitive 3D Environment and Asset Manipulation**

Providing children with user-friendly tools to construct their township, allowing for easy manipulation of buildings and amenities.

## **Contextual Guidance and Performance Indicators**

Offering clear instructions and visual cues to guide children through the simulation and provide feedback on their decisions.

## **Dynamic Badge and Certificate Generation**

Rewarding children for their achievements with virtual badges and certificates, encouraging continued engagement and learning.

## **Seamless Hosting on Robust Cloud Infrastructure**

Ensuring reliable performance and accessibility by hosting the simulation on robust cloud servers capable of handling high traffic and user interactions.



# PROJECT EXECUTION

## **Gameplay Prototyping & Storyboarding**

Initiated the project by creating initial prototypes and storyboards to outline the gameplay mechanics, user interactions, and overall flow of the simulation.

## **3D Model Creation**

Developed detailed 3D models of various buildings, amenities, and environmental elements required for the township, ensuring high-quality visuals and realistic representations.

## **Game Logic & Scoring Implementation**

Implemented complex game logic and scoring algorithms to enable interactive gameplay, track children's progress, and provide feedback on their design choices and sustainability efforts.

## **Cloud Services Integration**

Integrated the simulation with robust cloud infrastructure to ensure reliable performance, scalability, and accessibility, allowing for seamless hosting and management of user data and interactions.

## **Testing & Polish**

Conducted thorough testing and refinement phases to identify and address bugs, usability issues, or performance concerns, ensuring a polished and optimized final product ready for deployment.



# OUTCOMES & RESULTS

## **High Engagement Measured by Average Session Duration:**

Demonstrating the simulation's ability to captivate children's attention and keep them actively engaged in the learning process.

## **Strong Educational Impact Shown in Exit Surveys:**

Evidencing the effectiveness of the simulation in conveying urban design and sustainability concepts to its young audience.

## **Increased Brand Awareness for Sustainability Messaging:**

Successfully promoting Mahindra's brand values around green technology and sustainability through the interactive exhibit.

## **Positive Feedback from Children and Parents:**

Receiving praise and positive reviews from both children and parents for the educational and entertaining experience provided by the Township Building Studio.

 [Click to watch video](#)



**mahindra** LIFESPACES

Building a home often disrupts the natural habitat and contributes significantly to carbon emissions. As a Green Army Architect, you can now thoughtfully craft a sustainable development by selecting sustainable measures and features leading to a healthier and more comfortable living environment.



# CONCLUSION

The Township Building Studio leverages interactive technology to immerse children in sustainability concepts. By entertaining education, the 3D simulation left a strong impression on its young audience while cultivating an appreciation of urban design. The exhibit's resounding popularity is a testament to Kidzania's knack for innovation.







# THANK YOU!



India

Ground Floor, Carnival Technopark  
Technopark Campus, Trivandrum  
Pin - 695581, Kerala  
Phone +91 9037737788

---

United Arab Emirates  
Phone: +971 58505 6222

---

Singapore  
Phone: +65 8359 4878



Email - [business@tiltlabs.io](mailto:business@tiltlabs.io)

[WWW.TILTLABS.IO](http://WWW.TILTLABS.IO)