

MICHIGAN STATE

UNIVERSITY

Alpha Presentation

Yard Wars: Weathering the Storm

The Capstone Experience

Team Auto-Owners

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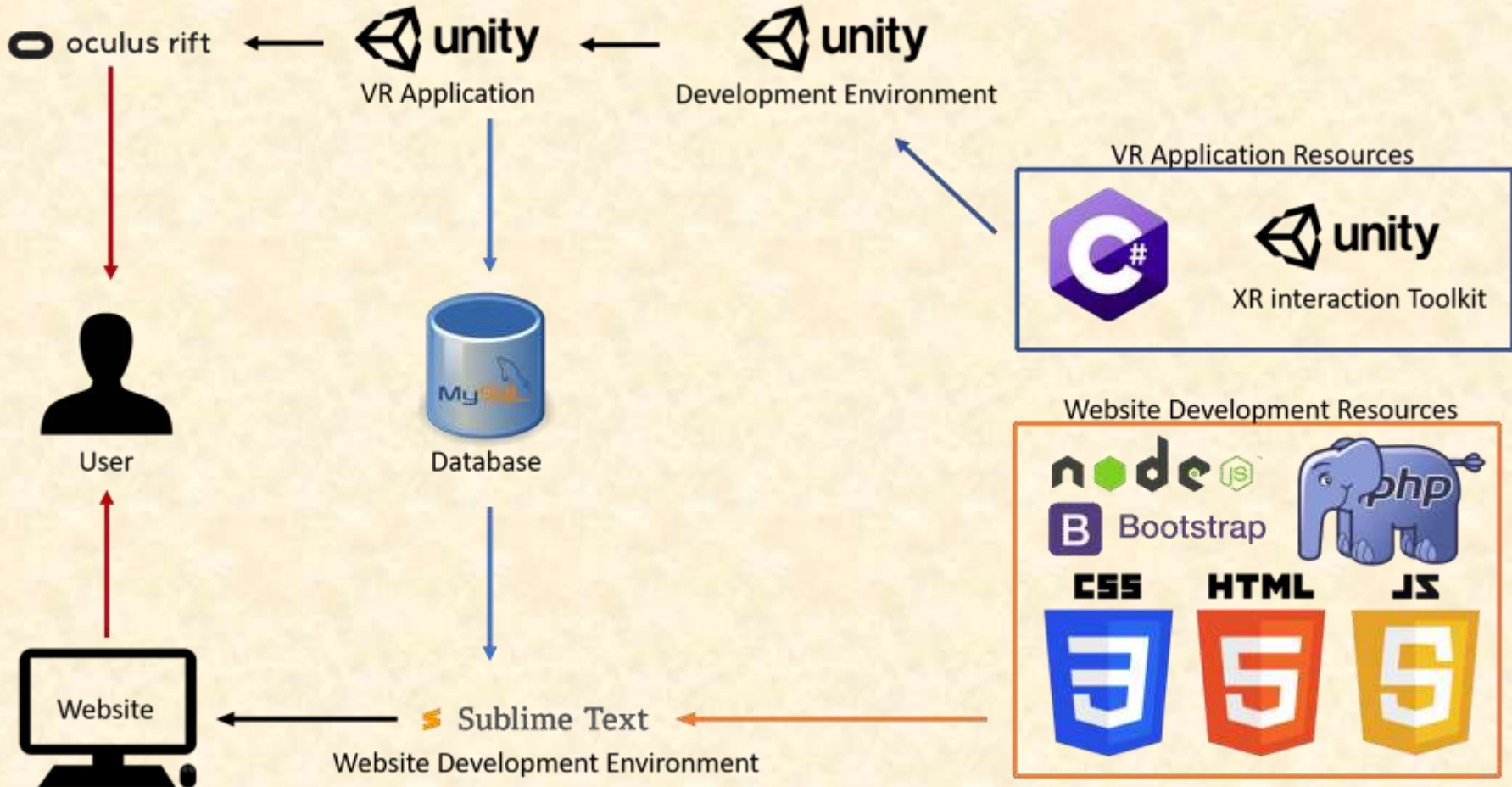
*From Students...
...to Professionals*

Project Overview

- Virtual reality application
- Place trees around the yard of a virtual residence
- Simulate different storms on the property
- Determine if the trees pose a risk or help protect the home
- Send simulation data to an external database
- View and analyze on the website



System Architecture



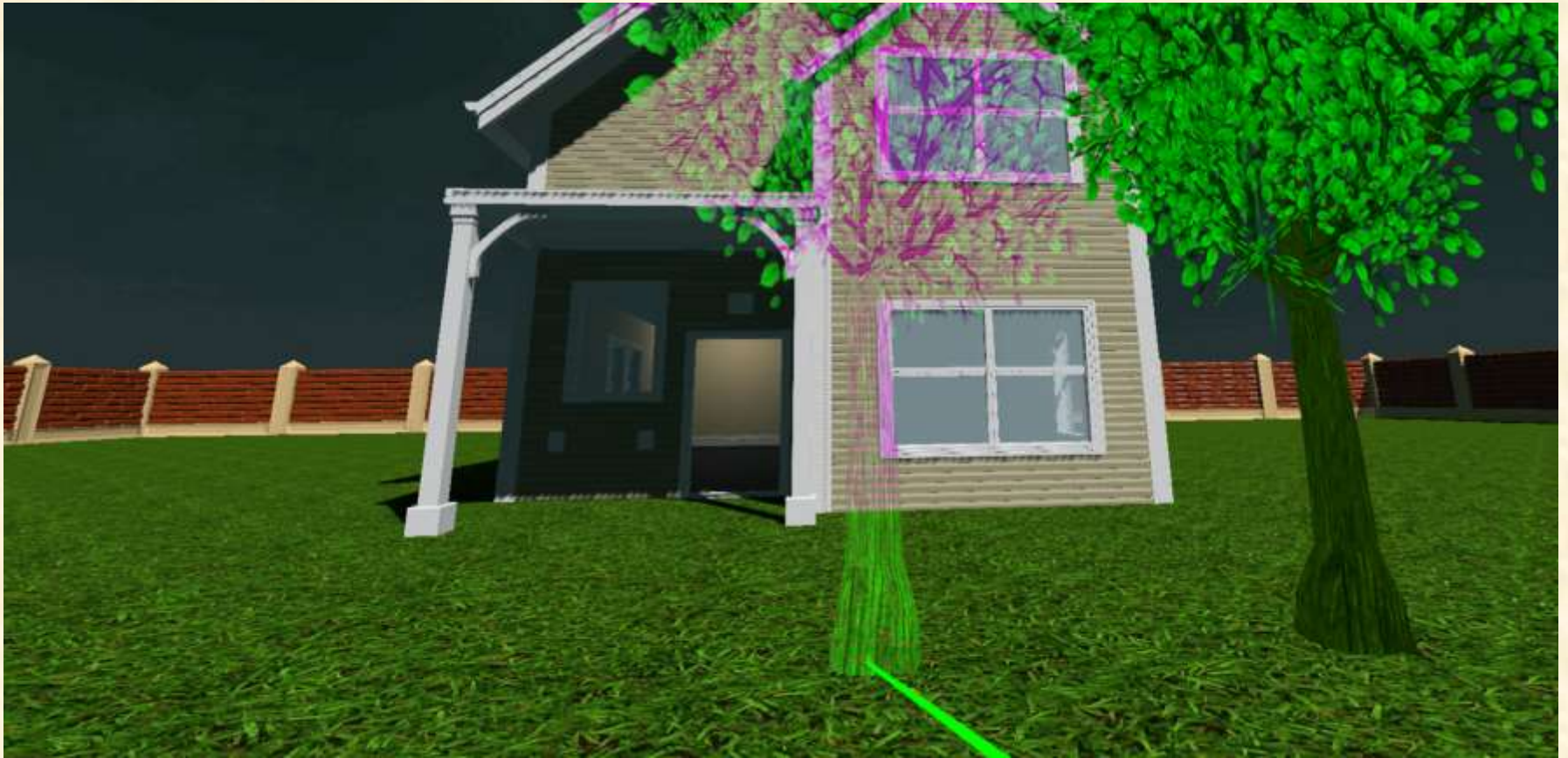
Storm Selection Menu



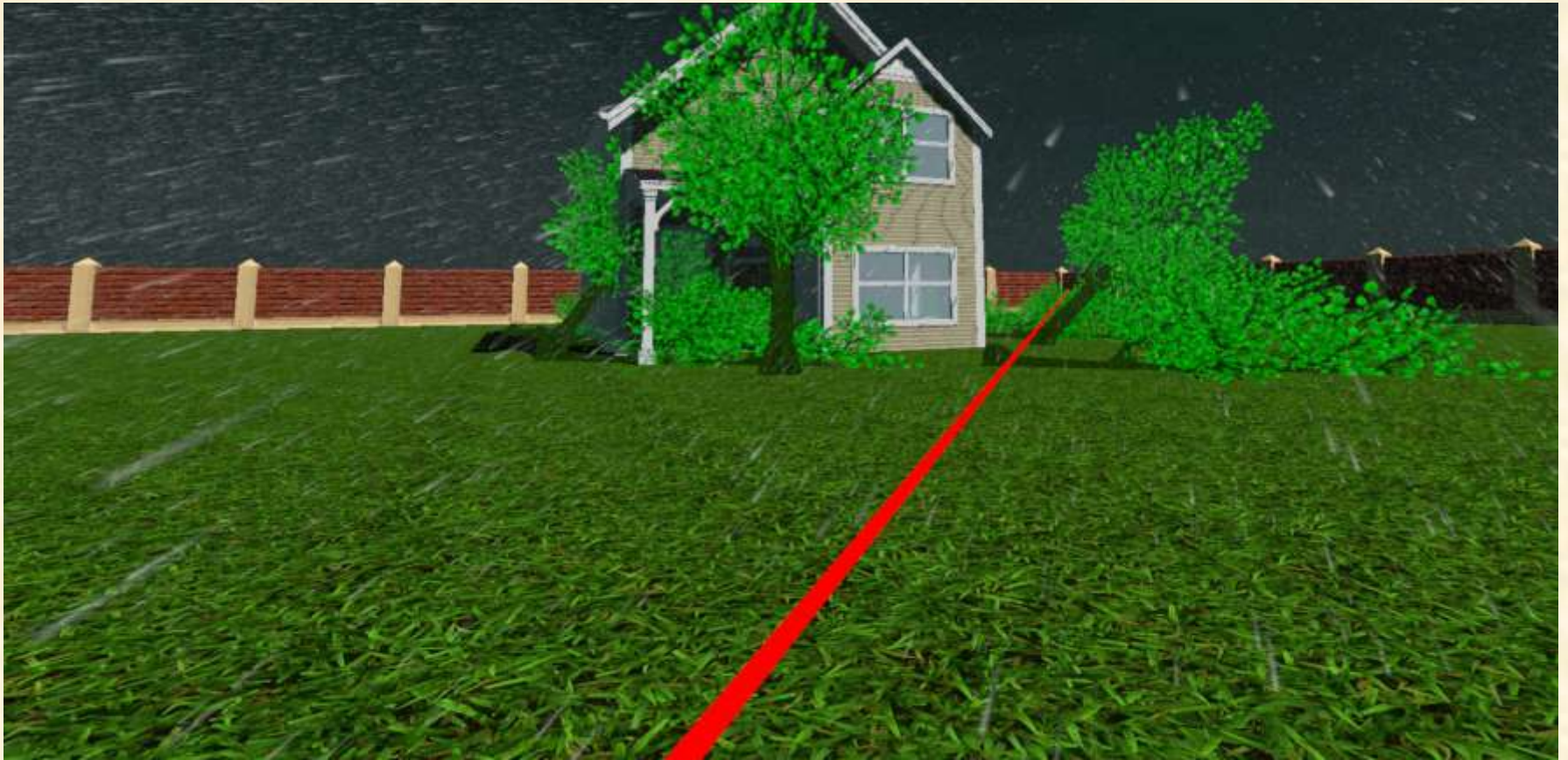
Tree Menu



Tree Placement



Falling Trees



Website Data

Auto-Owners
INSURANCE

Simulation Data

Simulation ID	Difficulty level	Rain	Wind	Hail	Number of Trees	Damage Information
1	Hard	Heavy	Severe	Large	8	8:Y, 6:N, 4:N, 2:N
2	Medium	Moderate	Moderate	Medium	8	8:Y, 7: N, 6:N, 4:Y, 2:N
3	Easy	Light	Light	Small	7	3:N
4	Custom	Heavy	Moderate	Small	8	3:N, 4:N, 8:N



What's left to do?

- More accurate damage and weather calculations
- Additional UI to track fallen trees, damage, weather and time
- Tree protection calculation
- Additional weather visual effects (hail, wind direction)
- Visual damage to home
- Search/Filter website data



Questions?

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