

MICHIGAN STATE

U N I V E R S I T Y

Beta Presentation

Yard Wars: Weathering the Storm

The Capstone Experience

Team Auto-Owners

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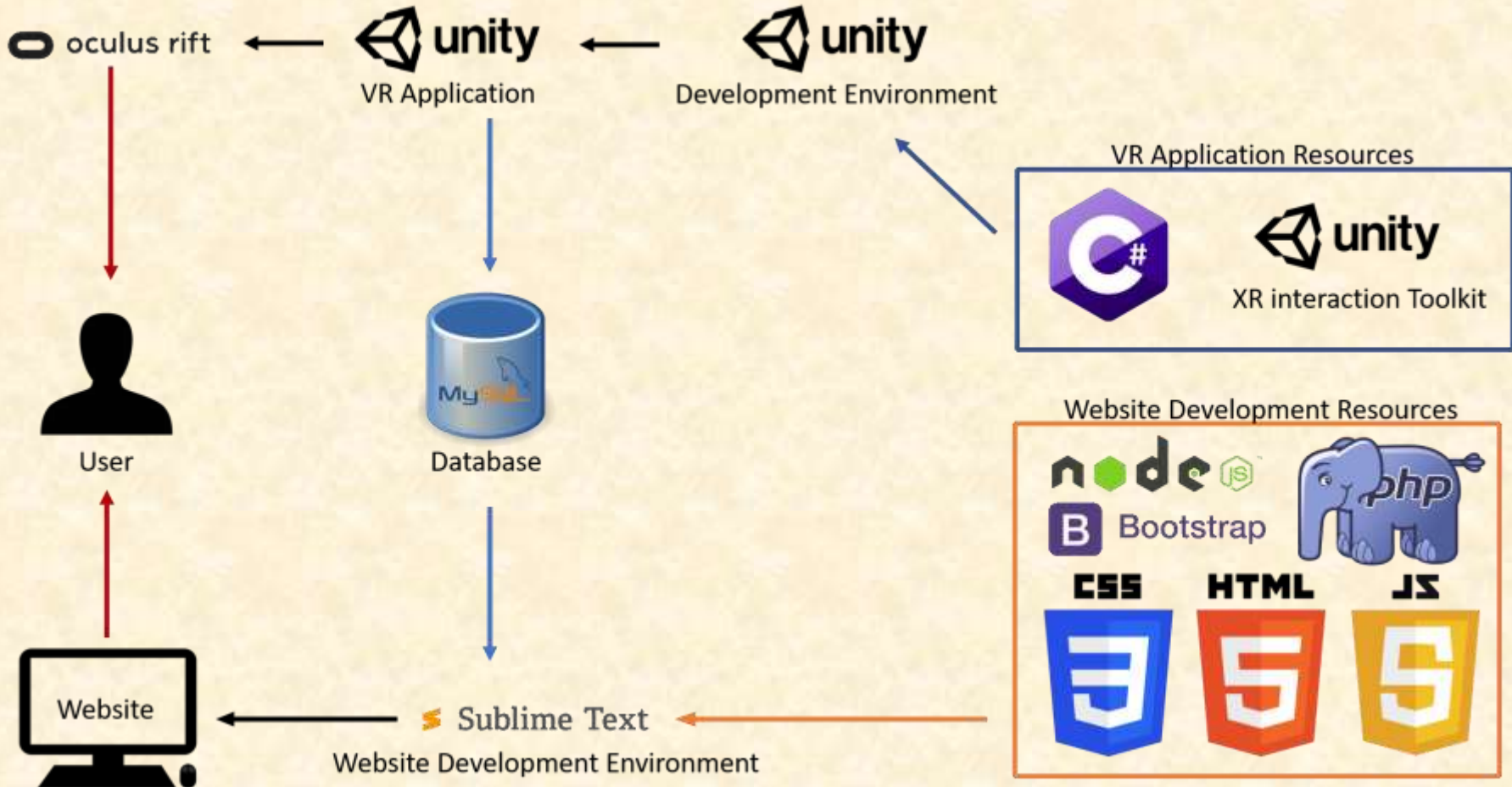
*From Students...
...to Professionals*

Project Overview

- Simulate various storms
- Place trees around virtual residence
- Evaluate risk of damage to homes/properties
- View and analyze data on the website



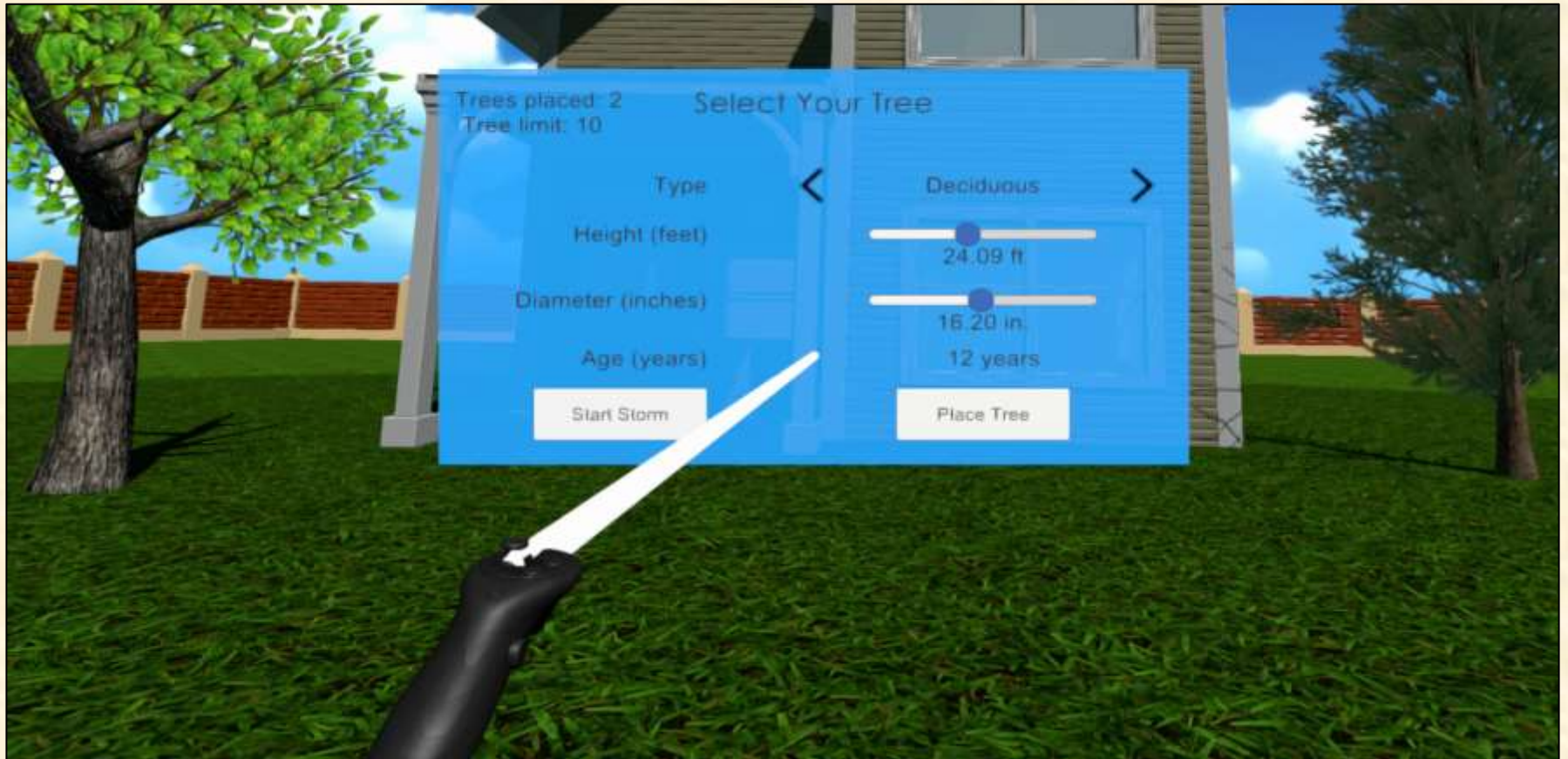
System Architecture



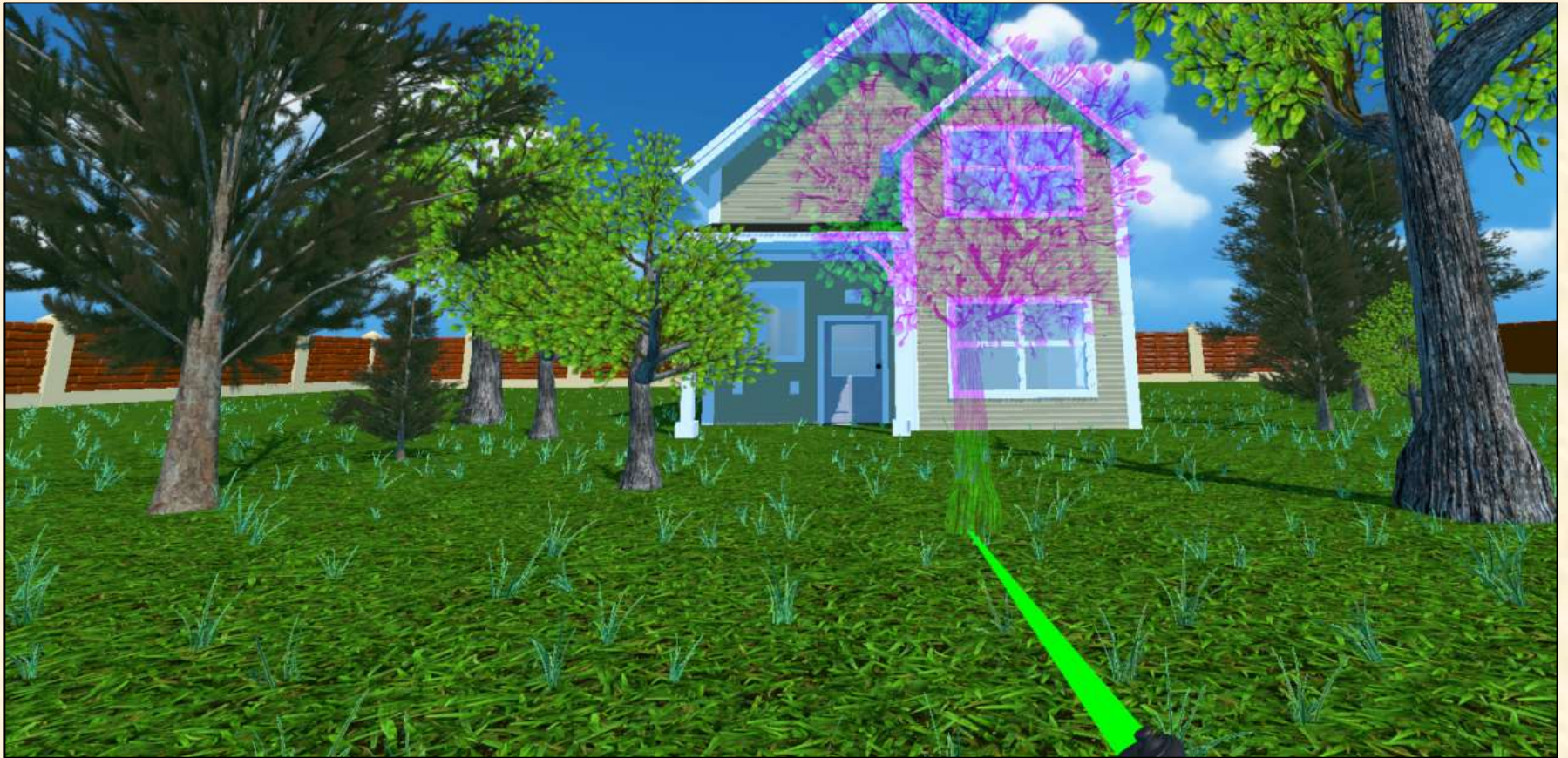
Storm Selection Menu



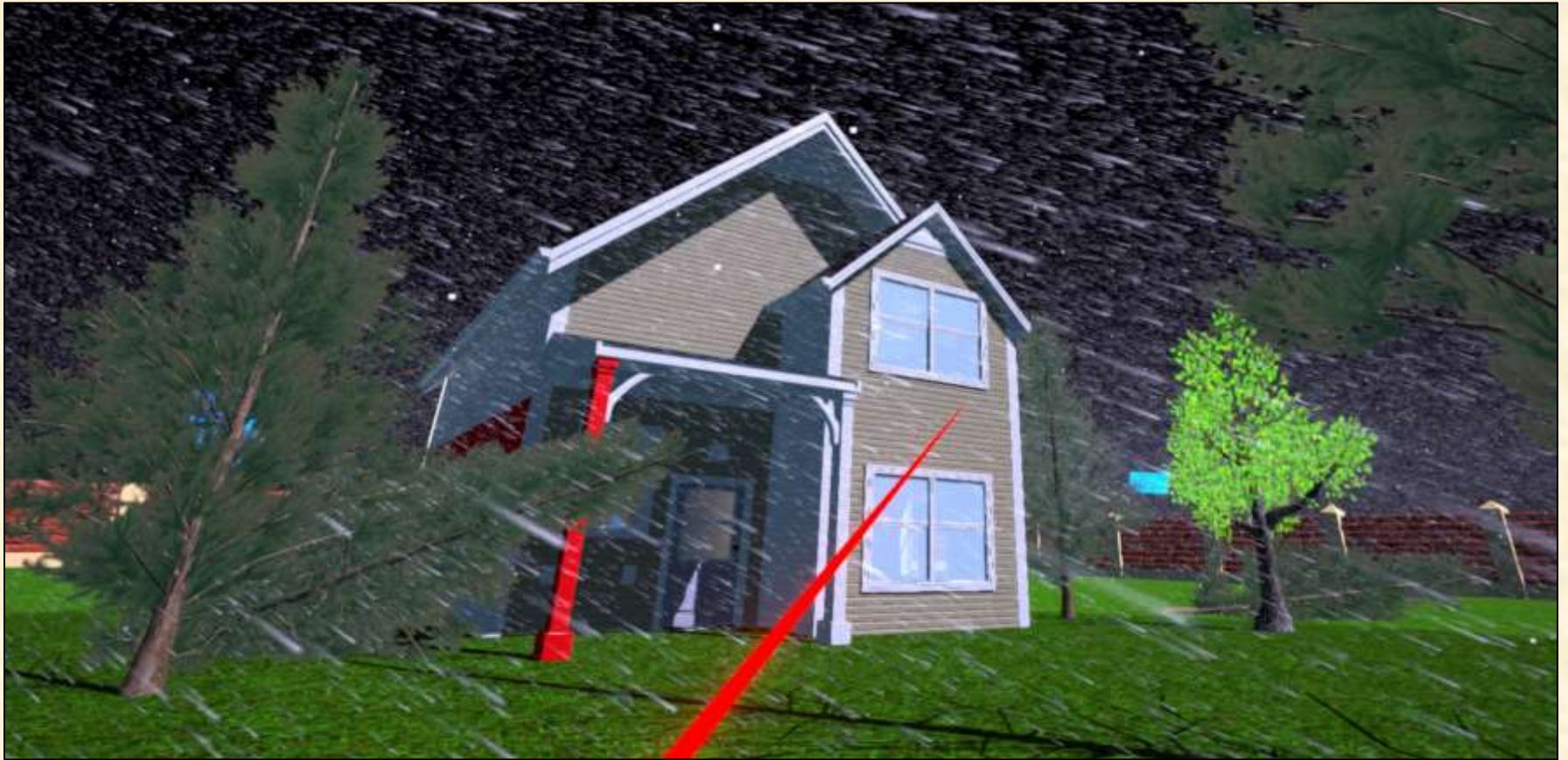
Tree Menu



Tree Placement



Falling Trees



Website Data

**Auto-Owners
INSURANCE**

Table

Simulation ID	Time	Difficulty	Wind	Hail	Rain	Trees Planted	Weather Damage	Tree Damage	Tree Information
20211114165938	0:21.08	Easy	Light - 2.00 mph	Small - 0.49 in.	Light - 0.10 in.	3	\$9.30	\$0.00	Details
20211114170124	0:21.76	Hard	Severe - 43.00 mph	Large - 0.97 in.	Heavy - 2.47 in.	8	\$106.80	\$4005.07	Details
20211114170318	0:31.42	Medium	Moderate - 26.00 mph	Medium - 0.59 in.	Moderate - 1.38 in.	11	\$159.75	\$4345.92	Details
20211114185854	0:5.48	Hard	Severe - 42.00 mph	Large - 0.82 in.	Heavy - 0.10 in.	1	\$22.50	\$0.00	Details
20211114185810	1:52.40	Custom	Moderate - 20.00 mph	Medium - 0.55 in.	Moderate - 3.08 in.	14	\$2248.75	\$4669.31	Details
20211114191756	0:56.81	Hard	Severe - 46.00 mph	Large - 0.86 in.	Heavy - 3.37 in.	8	\$701.05	\$7299.44	Details
20211114192829	0:17.56	Hard	Severe - 31.00 mph	Large - 0.83 in.	Heavy - 3.50 in.	8	\$84.00	\$3510.83	Details
20211114201459	0:30.52	Hard	Severe - 51.00 mph	Large - 0.92 in.	Heavy - 1.17 in.	6	\$594.55	\$8378.95	Details



What's left to do?

- Stretch Goals
 - Wind Speed/Direction Options
 - Fast-Forward Option
 - Visual/VFX Improvements
 - Music
 - Lightning



Questions?

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