UC-336

Concrete Formwork Simulator

INTRO/ABSTRACT

Concrete Formwork Simulator is a simulation game designed to help those learning construction or experienced with construction. Choose from wall, column, and slab formworks to practice with and be scored on each step of the way. Train buying the correct number of materials, cutting them efficiently, and assembling the structures in the correct order.

METHODS

Made with: Unity 2020.2.5f1 C# Scripting in Visual Studio

Source Control: Github

3D Models: Made with Maya

Sound Effects and Music: Freesound, HumbleBundle



Formwork and Construction expertise provided by Dr. Pavankumar Meadati

RESULTS

Our game successfully provides those learning construction a way to gain practice buying, cutting, and assembling formwork pieces in a more engaging way than traditional assignments.



EGE OF COMPUTING AND

SOFTWARE ENGINEERING





Concrete Formwork Simulator is a simulation game designed to help those learning construction or experienced with construction practice efficiently buying, cutting, and assembling materials for concrete formwork.

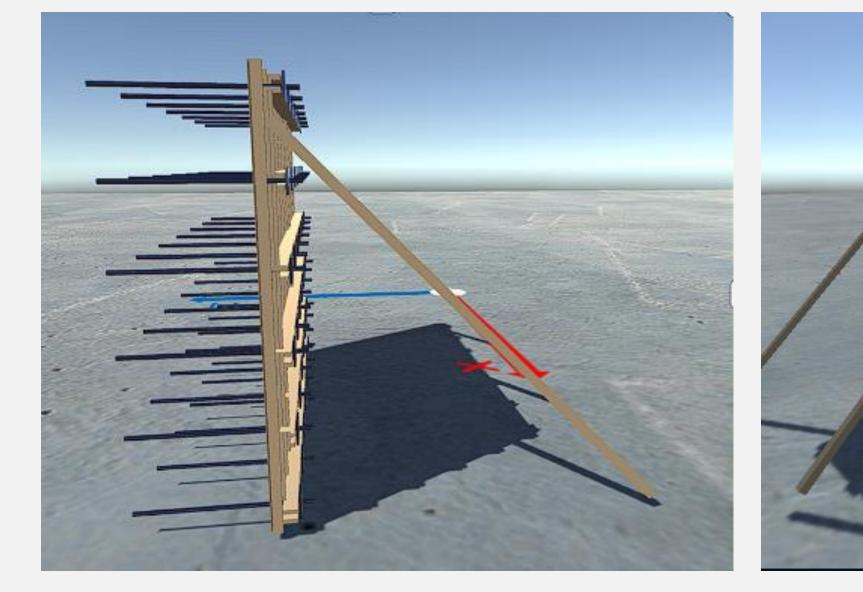


Figure 1: Wall Formwork Model



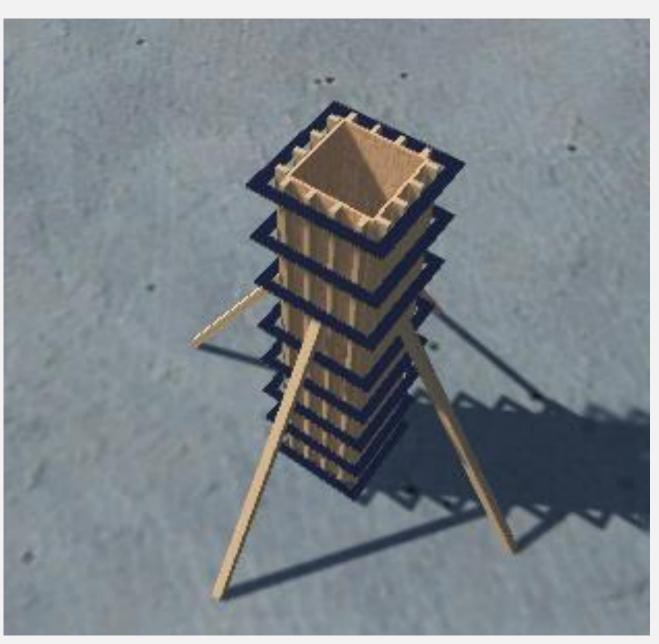
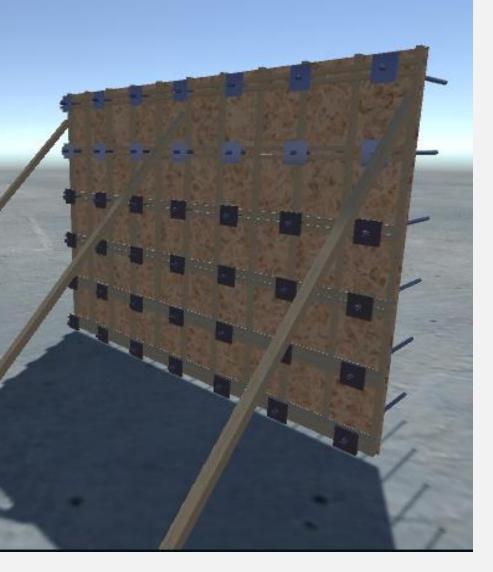
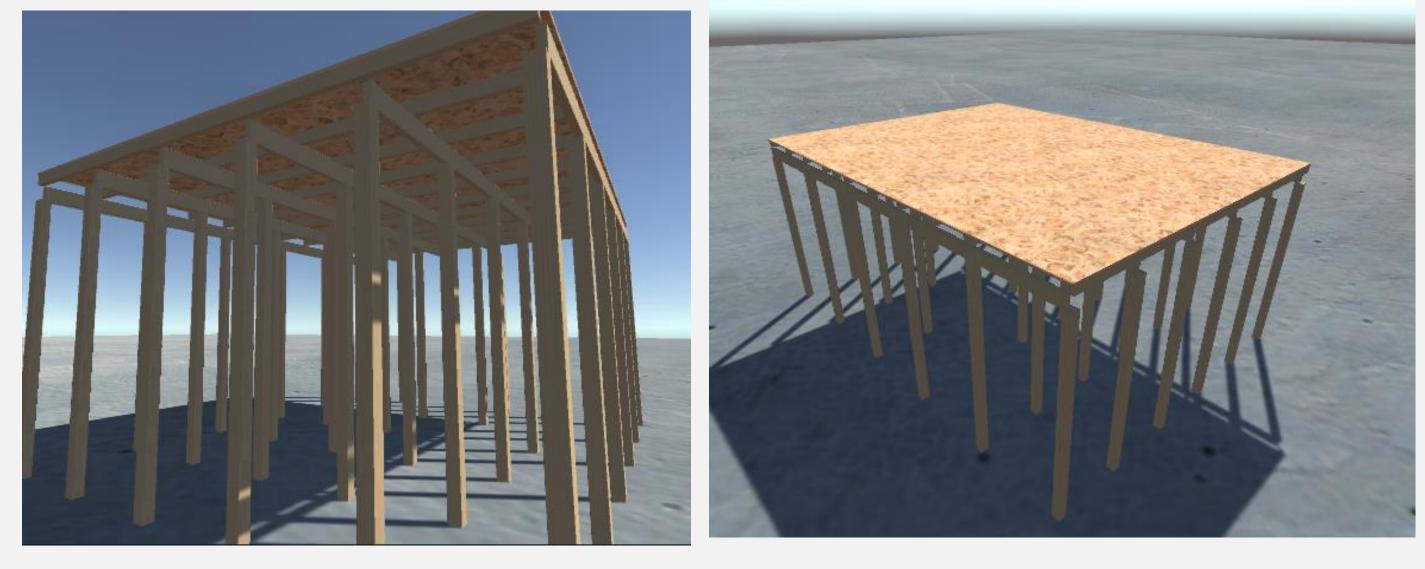


Figure 3: Column Formwork Model



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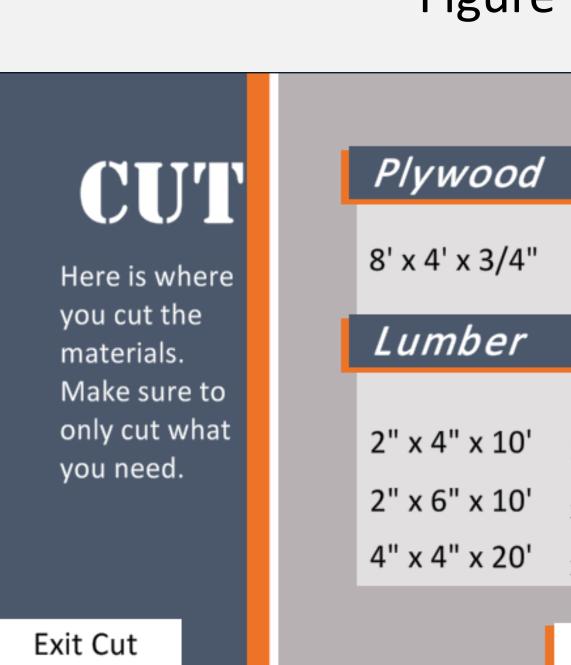


Figure 4: Cut User Interface

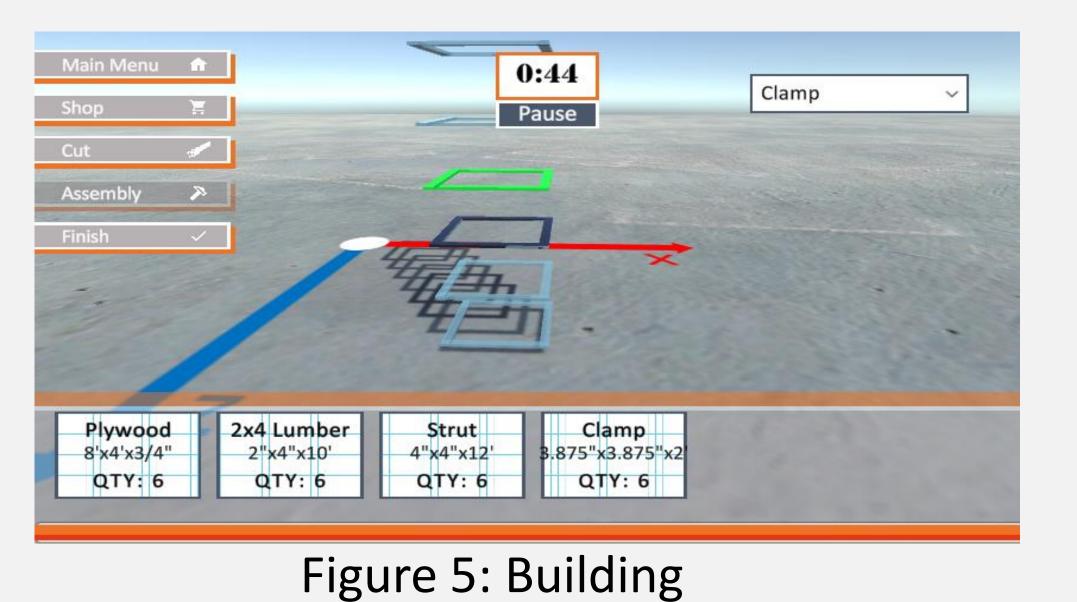


Figure 2: Slab Formwork Model

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|----|-----------|--------|-----|
| , | 8~ | | |
| | | | |
| ΤΥ | Length | | QTY |
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| | 19 ~ 000 | | 0 ~ |
| | | | |
| | Cut Mater | rials! | |
| | | | |