Learning Environment using Mixed Reality Information Model

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Introduction & Background

- Technology became integral part to the students.

- Students have diverse learning styles.

- Traditional methods may cause disengagement.

- Engaging technology savvy students in the learning process with their preferred learning style is a challenging task.

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Aim, Objectives, and Scope

- The goal of the research project is to develop an MRIM and use it for teaching construction courses.
- The study will be conducted in two phases.
- The first phase focuses on the development of MRIM.
- The second phase focuses on the use of MRIM in teaching residential construction processes.
- This paper presents an overview of the steps involved in the first phase of the research which includes MRIM framework development and using it for developing a learning environment.
- The second phase scope is not included in this paper.
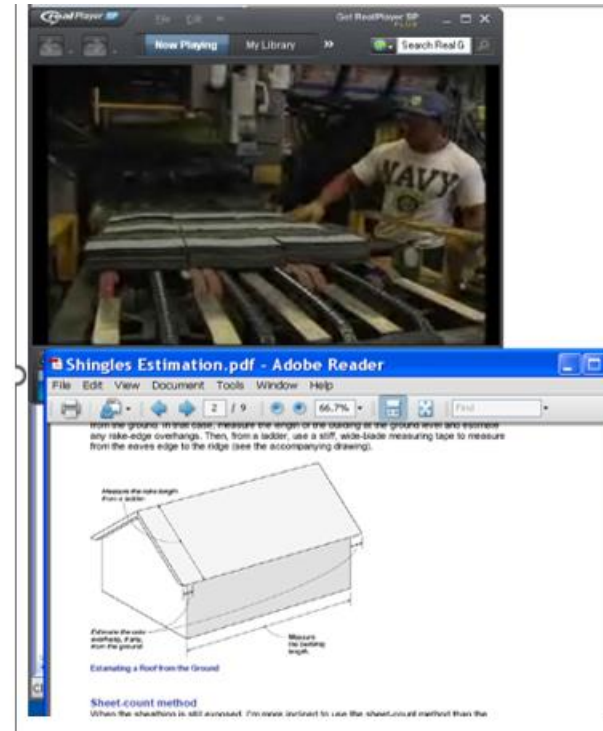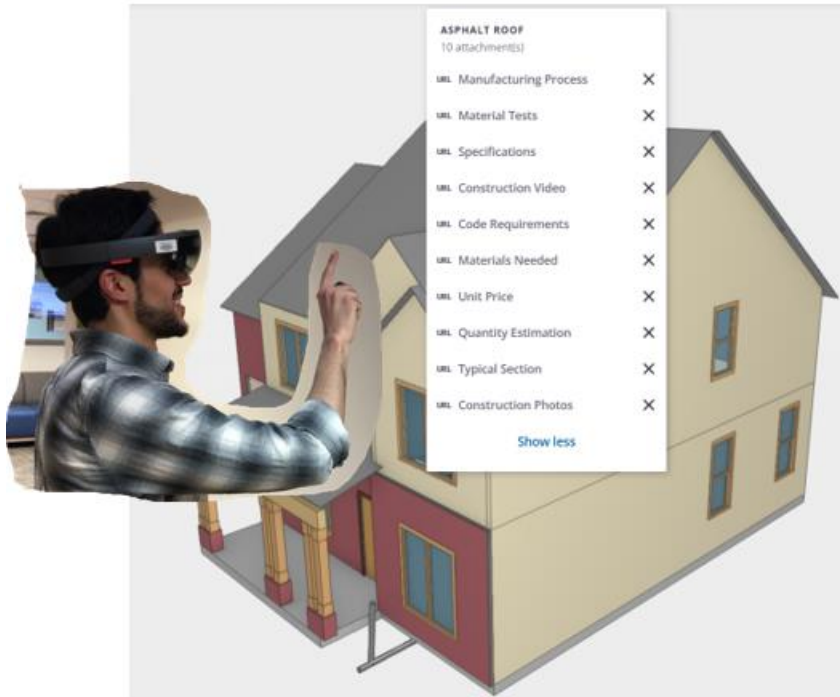
Research Design and Methodology
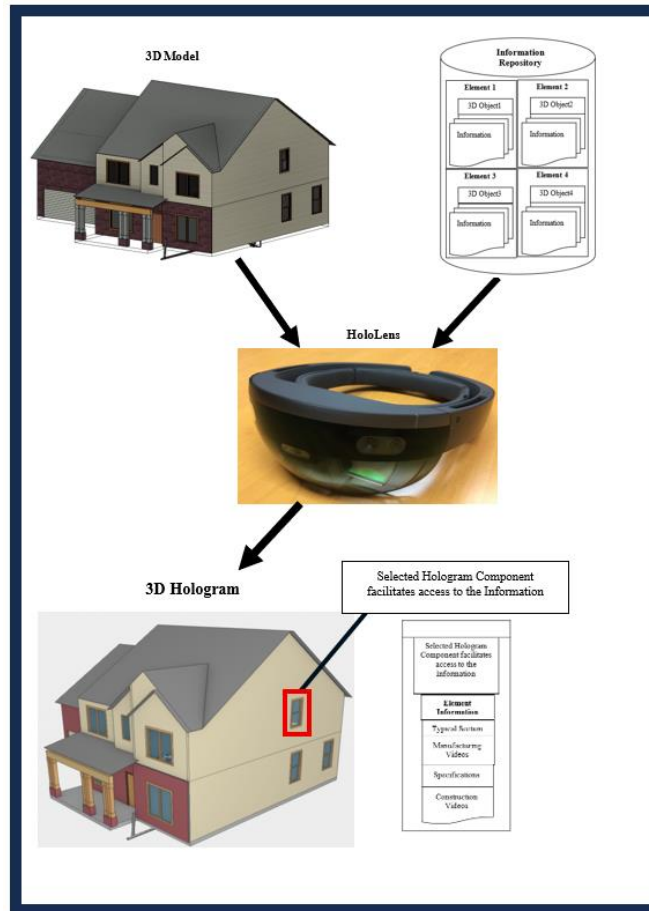
MRIM Learning Environment
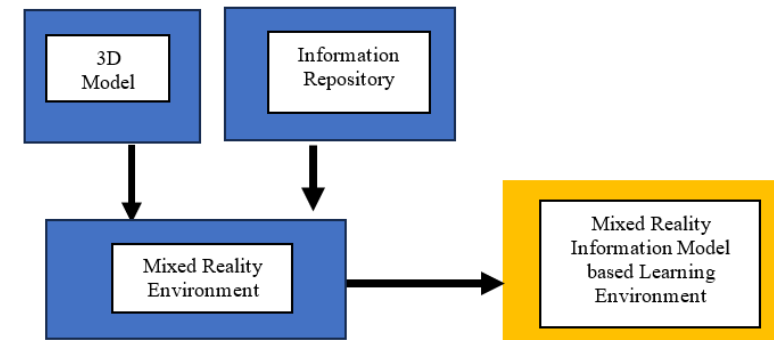
MRIM Framework

Results

User retrieving manufacturing video and estimation guidelines for Asphalt Shingles roof component in MRIM

Discussions, Conclusions & Recommendations

- MRIM increases engagement and learning.
- Integrates touch, sight, and hearing.
- Offers potential for improved teaching in construction education.

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