



INFORMED CONSENT

<Title of the Study>

TITLE OF STUDY

Automated Floor Plan Generation and Cost Prediction Using Al-Based Modeling for Residential Construction

RESEARCHERS

Arkeo Jewel L. Pausal Zachary Josiah M. Labang Abdel Khaliq B. Abdulla Nur M. Balla

Department of Computer Science College of Computing Studies Western Mindanao State University Zamboanga City

Phone: 09928285719 Email: [Email Address]

PURPOSE OF STUDY

You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information.

The purpose of this study is to develop an Al-powered system that can automatically generate floor plans based on user preferences and provide preliminary construction cost estimates. This research aims to create a prototype that bridges the gap between design visualization and budgeting in residential construction planning, making early-stage project planning more accessible to both professionals and non-technical users.

STUDY PROCEDURES

If you agree to participate, you may be involved in one or more of the following activities:

1. **Expert Interviews (30-45 minutes):** If you are a construction professional, architect, or engineer, you may be asked to participate in structured interviews to





INFORMED CONSENT

<Title of the Study>

- provide insights on cost estimation practices, construction standards, and feedback on the system's accuracy.
- 2. **System Evaluation (20-30 minutes):** You may be asked to test the prototype system by inputting building preferences and evaluating the generated floor plans and cost estimates for accuracy and usability.
- 3. **Floor Plan Review:** Construction professionals may be asked to review sample floor plans generated by the system and provide manual cost estimates for comparison purposes.
- Feedback Sessions (15-20 minutes): Participants may be asked to provide feedback on the user interface, system functionality, and overall usefulness of the tool.

RISKS

Minimal risks are associated with this study:

- There may be minor inconvenience due to time commitment for interviews or system testing
- No physical, psychological, or social risks are anticipated
- All participation is voluntary and you may skip any questions that make you uncomfortable

You may decline to answer any or all questions and you may terminate your involvement at any time if you choose.

BENEFITS

Direct benefits to participants:

- Professionals may gain insights into emerging AI technologies in construction
- Opportunity to contribute to innovative research in construction technology
- Access to preliminary results that may inform future practices

There will be indirect benefits to you for your participation in this study. However, we hope that the information obtained from this study may contribute to making construction planning more efficient, accessible, and cost-effective for the industry and general public. The research may help bridge the gap between design visualization and accurate budgeting in residential construction.





INFORMED CONSENT

<Title of the Study>

CONFIDENTIALITY

Your responses to this study will be kept confidential. Every effort will be made by the researcher to preserve your confidentiality including the following:

- Assigning code names/numbers for participants that will be used on all research notes and documents
- Keeping notes, interview transcriptions, and any other identifying participant information in a locked file cabinet in the personal possession of the researcher
- Using only aggregated, de-identified data in research publications and presentations
- Limiting access to raw data to the research team members only
- Secure digital storage with password protection for all electronic files

Participant data will be kept confidential except in cases where the researcher is legally obligated to report specific incidents. These incidents include, but may not be limited to, incidents of abuse and suicide risk.

CONTACT INFORMATION

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Researcher(s), please contact the Department or College.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.





INFORMED CONSENT <Title of the Study>

Participant's signature:

Date: August 24, 2025

Researcher's signature

Date: August 24, 2025