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2 ASSESSMENT 1 BRIEF

MODULE: ARCHITECTURAL STRUCTURE, NINGBO UNIVERSITY

MODULE FACILITATOR: DR. MIA A. TEDJOSAPUTO

7 April 2021

Deadline of Assessment 1 : in Week 10, May 8th, 2021

Type of assessment : Individual work

This document contains detailed description of Assessment 1. The assessment itself is slightly altered from initial intention due to the current pandemic situation, particularly in regard to illustrated LO (Learning Outcome) 3 on having exercised construction skills during the module.

At this stage you would have a better understanding on how different structural systems work. In this assessment, you are expected to produce a set of technical drawings. For the sake of parity, the size and general outlook of the building are specified. Please refer to the Sketch Up file and Figure 1.



Figure 1. Specified 3D outlook of a house for design brief

AIM OF THE ASSESSMENT

- To incorporate knowledge of material based structural system explored from Week 3-6 (timber, steel, concrete, and masonry structure).
- To show evidence on engagements with construction practice or theories
- To exhibit sufficient understanding of micro housing's building system and illustrate them in form of technical drawings.

THE PROJECT

You are expected to design a <u>structural system</u> for a landed house using parameters shown in Figure 1. The <u>governing parameters</u> are: the overall size (so everyone is working on the same scale of project) and layout of the house (so you don't have to worry about the design as it is not the focus of this assessment). However, the façade, roof and other system, you can modify them.

Your task is to design the structural system and your understanding is to be communicated in form of technical drawings and additional necessary images. Use systems we have explored from Week 3-6.

THE SCENARIO

Consider this scenario, you are the architect and is about to communicate your ideas to other stakeholders. In particular, potential contractors so your drawings need to be very clear for the potential contractors to calculate cost of construction.

EXPECTED OUTCOMES

- 1. One axonometry drawing of main structural system (only the structural system) with labels indicating the structural elements
- 2. One site plan, 1:500. You can design the surrounding, as your preferences
- 3. Two floor plans, 1:100.
- 4. Two section drawings (at least one long section), 1:100
- 5. Two elevation drawings (front and rear). 1:100
- 6. Two detailed drawings, 1:10 or 1:20 depending on the scale of detail.

Please adhere the architectural technical drawings convention which will be discussed in <u>Week 8</u>. For example, grids labelling needs to be clear.

FORMAT OF SUBMISSION

- 1. Properly labelled drawings with the minimum information of: template, scale, grids, dimensions, level annotations, name of drawings, etc see Week 7 materials for more details.
- 2. A3 format, single PDF format.
- 3. To be submitted via email to: mia@miatedjosaputro.com