

# ModRule

## A user-centric mass housing design platform

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**Abstract.** This paper presents a novel platform, ModRule, designed and developed to promote and facilitate collaboration between architects and future occupants during the design stage of mass housing buildings. Architects set the design-framework and parameters of the system, which allows the users to set their space requirements, budgets, etc., and define their desired way of living. The system utilizes gamification methodologies as a reference to promote incentives and user-friendliness for the layperson who has little or no architectural background. This enhanced integration of a both bottom-up approach (user-centric/player) with atop-down approach (architect-centric/game-maker) will greatly influence how architects design high rise living. By bridging the gap between the architect and the user, this development aims to instill a greater sense of belonging to people, as well as providing architects with a better understanding of how to give people more control over their living spaces. The paper also presents an evaluation of a design process that employed ModRule.

**Keywords:** Mass housing, collaborative design, participatory system.