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(57) Abstract :

The present invention discloses a Virtual Reality (VR) platform (100) for enhanced architectural design visualization, integrating a VR interface unit (101), real-time rendering engine (102), collaboration module (103), BIM integration module (104), and environmental simulation unit (105). The system enables immersive, real-time architectural walk-throughs, interactive design modifications (106), and collaborative sessions among stakeholders. Supported by data management server (107) and security protocols (108), the invention accelerates decision-making, reduces design revisions, and improves client satisfaction. The platform bridges architectural imagination with construction reality through immersive and collaborative VR experiences.

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