

BUILDSMART

-Blueprinting your future



PROBLEM STATEMENT

AI based Construction planning system that generates cost estimates, schedules, and resource plans based on project parameters.

It assists engineers and planners in making accurate, data backed construction decisions.

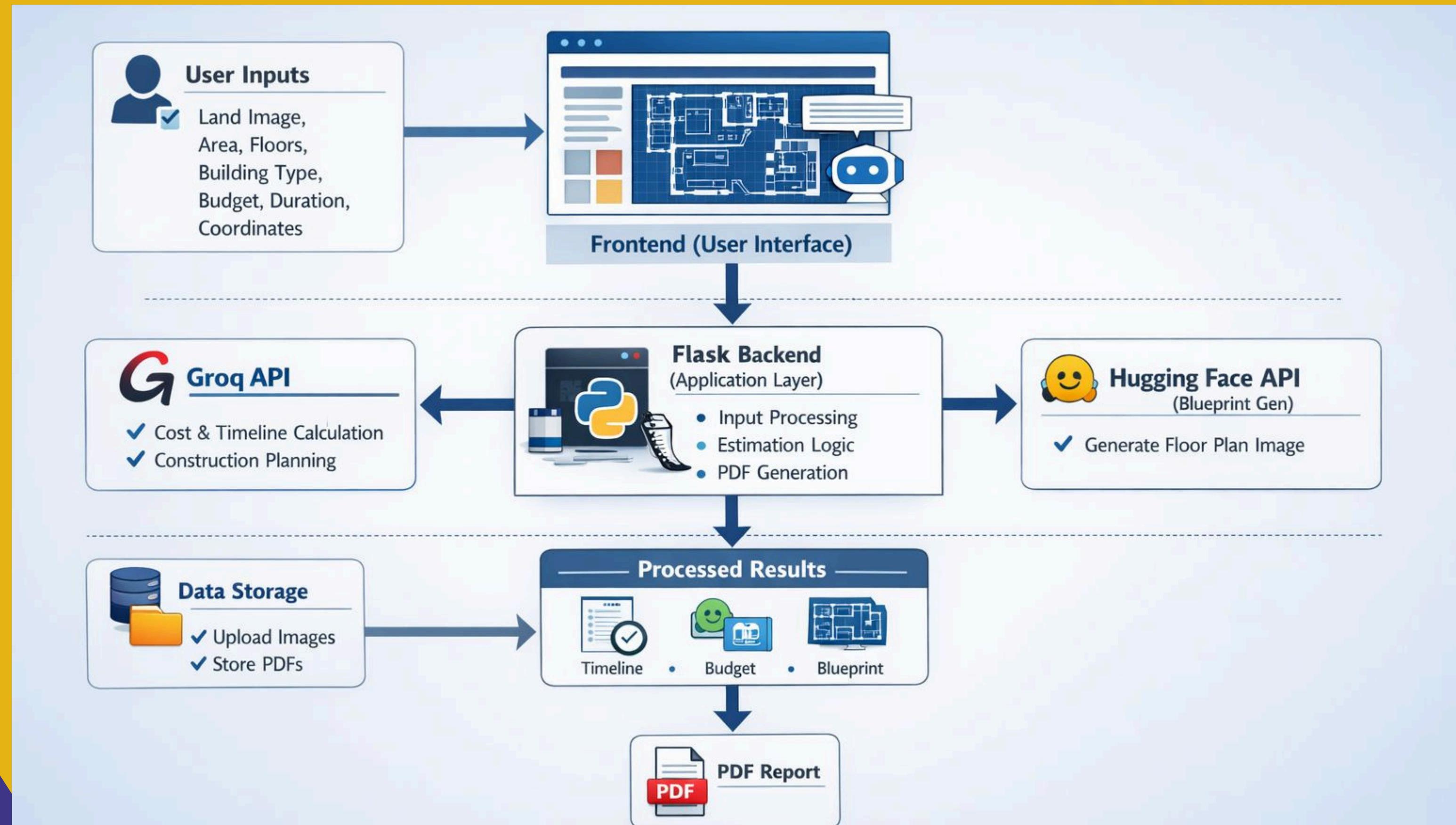




PROJECT OBJECTIVES

1. To collect construction requirements from users
2. To estimate construction cost, timeline, and resources
3. To generate visual blueprints based on user input
4. To integrate AI chatbot for construction guidance
5. To provide user-friendly and interactive web interface

ARCHITECTURAL DESIGN



KEY INPUTS



A

Land Image: On-site photo for site condition analysis

B

Geographic Coordinates: Location-based planning and weather analysis

C

Project Parameters: Area, floors, and budget

D

Timeline Constraints: Desired completion period

UNIQUE FEATURES

1. Hybrid AI system(uses groq and Hugging face APIs)
2. Input-Driven dynamic blueprints
3. Dynamic cost and timeline estimation
4. Smart budget adaptation
5. Downloadable professional output(Blueprint + plan PDF)
6. Integrated AI chatbot

CORE TECHNOLOGIES

- HTML5, CSS3, JavaScript
- Flask (Python)
- Groq API
- Hugging Face API
- Pillow & ReportLab

FUTURE SCOPE

- Virtual drawing of custom land shapes
- Blueprint generation for irregular plots
- Integration with interior design professionals
- 3D interior and layout visualization
- Collaborate with GHMC for automatic checking of land records, zoning rules and permissions



TECHSTARS

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THANK YOU