**Project Design Phase**

**Solution Architecture**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID30267 |
| Project Name | HealthAI: Intelligent Healthcare Assistant using IBM Granite |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

The HealthAI solution leverages IBM Granite 3.0 models to create a secure, efficient, and clinically effective healthcare assistant. Below is the technical architecture:

**Core AI Engine**

* **Granite 3.3-2b Instruct Model** as primary reasoning engine
  + Handles complex clinical reasoning and patient interaction
  + Processes EHR data, medical literature, and patient queries for real-time safety guardrails
  + Detects hallucinations and biases in medical advice
  + Ensures context relevance for diagnostic suggestions

**Example - Solution Architecture Diagram:**

