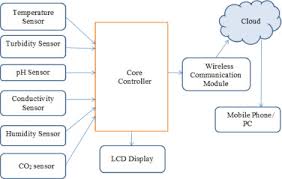
Project Design Phase-II Technology Stack (Architecture & Stack)

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| --- | --- |
| Date | 16 October 2022 |
| Project Name | Real Time River Water Quality Monitering  and control System . |
| Maximum Marks | 4 Marks |









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|  |  | Web Application | HTML, CSS,  JavaScript |
|  | Application Logic-1 | Logic for a process in the application | Python |
|  | Application Logic-2 | Logic for a process in the application | IBM Watson STT service |
|  | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
|  | Database | Data Type, Configurations. | MySQL |
|  | Cloud Database | Database Service on Cloud | IBM Cloudant |
|  | File Storage | File storage requirements | IBM Block Storage |
|  | External API | Purpose of External API used in the application | Showing Quality of Water , etc |
|  | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration | Cloud Foundry |

**Application Characteristics:**



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| --- | --- | --- | --- | --- |
| **S.No** | **Components** | **Description** | **Technology** | |
| 1 | Open-Source Frameworks | Open stack, Github. | Internet hosting service for software development and version control usingGit | |
| 2 |  | Web Application Firewall(WAF) | AWS WAF, | Cloudflare |
| WAF | |
| 3 |  | By building articles and authors into a single  query, the volume of queries can be reduced | IBM SQL. | |
| 4 |  | The load balancer intelligently routes client requests to the right server, in a manner that maximizes performance  and capacity utilization. | Web server, Load balancer | |
| 5 |  | Caching, Asynchronous conditions. | Cache memory, Content DeliveryNetwork. | |