PREAMBLE: Bolttech TechStack & Tools

|  |  |
| --- | --- |
| **Cloud Platform: AWS** | |
| 1 | EC2 |
| 2 | ECS |
| 3 | S3 |
| 4 | API Gateway |
| 5 | Lambda for serverless programming |
| 6 | Route 53 |
| 7 | Application Load Balancer (ALB) |
| 8 | Certificate Manager |
| 9 | Dynamo DB (AWS version of NoSql DB) |
| 10 | Security Groups |
| 11 | Target Groups |
| 12 | VPC |
| 13 | Subnets |
| 14 | Internet Gateways |
| 15 | NAT |
| 16 | AWS Glue for ETL |
| 17 | Athena (Athena is a query service that makes it easy to analyze petabytes of data in S3 with no data warehouses or clusters to manage.) |
| 18 | Lake Formation |
| 19 | Codestar |
| 20 | Aws Lex (Used for BOTS. Same technology which sits behind ALEXA) |
| 21 | SQS |
| 22 | SNS |
| 23 | CloudFront |
| 24 | CloudWatch |
| 25 | IAM for AWS Services access and roles |
| 26 | Cloud Formation |
| 27 | ECR |
| 28 | Cognito for Application level access and roles |
| 29 | RDS (AWS flavor of relation db) |
| 30 |  |

|  |  |
| --- | --- |
| **Frontend:** | |
| 1 | Angular 8 |
| 2 | Protractor for end to end testing of Angular |
| 3 | NPM |
| 4 | Yarn |
| 5 | Typescript |
| 6 | Visual studio as IDE |
| 7 | React |
| 8 | TenserFlow |
| 9 | Flutter for ISO/Android development |
| 10 | Angular AuthGuard |
| 11 | Angular routes |
| 12 | Gatsby |
| 13 | Figma (For wireFrames) |

|  |  |
| --- | --- |
| **Backend:** | |
| 1 | Spring Boot |
| 2 | Microservices |
| 3 | Maven |
| 4 | PHP Open LDAP for identity management |
| 5 | Apache LDAP client |
| 6 | Java |
| 7 | Nodes.js for serverless programming |
| 8 | Postman to access backend microservices |
| 9 | Netflix Hysterics for circuit breaker design pattern |
| 10 | EHCache |
| 11 | Aspect oriented programming (AOP) for interceptors |
| 12 | Spring security for authentication/authorization |
| 13 | JWT token |
| 14 | OAuth 2 |
| 15 | Lombok api for reducing boiler plate code |
| 16 | Spring DI |
| 17 | Saga Design pattern for distributed services via Orchestration and Choreography |
| 18 | Kafka for queue based asynchronous communication |
| 19 | Websockets for live streams |
| 20 | Reactive programing using Mono/Flux |
| 21 | Eureka as discovery server |
| 22 | Cloud config to decouple application properties from individual services |
| 23 | Office 365 for Emails trigger |
| 24 | Wavecell/Twilio for SMS |
| 25 | Spring scheduler via cronJobs |
| 26 | Javers for auditing |
| 27 | BPM tool: Flowable |
| 28 | OfBiz |
| 29 | Keycloak |
| 30 | Pretty Good Privacy (PGP encryption/decryption) |
| 31 | Jfrog (Artifactory repository) |

|  |  |
| --- | --- |
| **Database:** | |
| 1 | MongoDB |
| 2 | Studio 3T, Robo 3t, Mongo Compass as client for accessing MongoDB |
| 3 | PostGreySql |
| 4 | PGAdmin as client |
| 5 | Oracle |
| 6 | MySql |
| 7 | RDS |
| 8 | DynamoDb |

|  |  |
| --- | --- |
| **Code Monitoring:** | |
| 1 | Prometheus |
| 2 | Grafana |
| 3 | Elastic Log-Stack Kibana (ELK) |
| 4 | PingDom |
| 5 | PinPoint |
| 6 | Aws CloudWatch |

|  |  |
| --- | --- |
| **DevOps:** | |
| 1 | Jenkins |
| 2 | Jenkins X for Kubernetes integration |
| 3 | Kubernetes |
| 4 | BitBucket as VCS |
| 5 | Containerization of services by Docker |

|  |  |
| --- | --- |
| **Project management tools:** | |
| 1 | Jira |
| 2 | Confluence |
| 3 | SharePoint |
| 4 | Teams |
| 5 | Slack |
| 6 | Trello |
| 7 | Agile Methodology |
| 8 | Squad, Chapter, Guild formation |
| 9 | Zoom |
| 10 | Office 365 for emails |
| 11 | Pointing-Pocker (used for story point estimation by team online) |
| 12 | Miro (Online live board for editing and collaborative |
| 13 | Clockify (For squad’s time management) |