

Mojo Banking Solutions, Inc.

Project Implementation Plan



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BSA425

| **Task** | **Activity Name** | **Resource** | **Schedule Start Date** | **Schedule**  **Finish Date** | **Schedule Comments** |
| --- | --- | --- | --- | --- | --- |
| **Prepare for Implementation** | Assemblage and briefing of implementation team. | CEO, Developers, Software Engineers, Technical leads, CSO/CISO, CFO | 11/02/2020 | 11/06/2020 | Go over system layout including services offered and proposed infrastructure; address software interface with AWS systems. |
| Order appropriate hardware to connect to cloud environment (in house server, terminals, firewall, remote access tools, etc.). | Software engineer, system engineer, system architect, CFO (project budget) | 11/05/2020 | 11/23/2020 | Decide with hardware vendor to have tech delivered as soon as possible; everything should be invoiced and inventoried (Record serial numbers and other identifying characteristics) |
| Establish contract with service provider (Amazon Web Services) | CSO, CISO, CEO, Upper/Middle Management, Lead Software Architect | 11/16/2020 | 12/11/2020 | Review contract with firm understanding of what is being utilized by AWS to build the proposed infrastructure. |
| Establish AWS EC2 Environment | System engineer, System architect, supervisory staff | 11/23/2020 | 12/18/2020 | Notions put in place to take advantage of AWS’s expanding infrastructure; design put in place to allow for the utilization of said infrastructure. |
| Establish Amazon Elastic Block Store (EBS) and Simple Storage Service (S3) | System engineer, System architect, supervisory staff. Software engineer, software architect | 11/30/2020 | 12/23/2020 | Set up needed storage space to keep both mobile and web application operational; devise how much storage will be needed for overflow or high traffic. |
| Establish AWS security infrastructure; configure AWS Shield, GuardDuty, CloudWatch, Inspector, and Prowler. | supervisory staff. Software engineer, software architect, CISO/CIO | 12/01/2020 | 12/23/2020 | Implementation of cybersecurity plan and framework; set up various Amazon Security services. |
| Establish AWS Relational Database for storage of data, link it to established AWS infrastructure. | supervisory staff. Software engineer, software architect | 12/14/2020 | 01/15/2021 | Generate relational database to hold customer data; establish relationships between various tables as they pertain to company services. |
| Build C++ based back end application for Online and Mobile based banking application. | Project Software Engineers, Project developers (back end), Project Managers. | 01/18/2021 | 03/26/2021 | Establish the back-end C++ Based programming to run the web and mobile application infrastructure. |
| Build JavaScript based front end application for Online and Mobile based banking application. | Project Software Engineers, Project developers (front end), Project Managers. | 01/18/2021 | 03/26/2021 | Establish the front -end JavaScript Based programming to run the web and mobile application interface. |
| **Prepare Test Environment** | Build test infrastructure both physical and cyber. | Test supervisors, software architect/engineers | 03/01/2021 | 04/02/2021 |  |
| Unit Testing | Testing supervisors, Testing personnel | 03/08/2021 | 03/12/2021 | Basic class constructions tested for both front and back end constructs. |
| Integration Testing | Testing supervisors, Testing personnel | 03/15/2021 | 03/26/2021 | Testing of integration of front and back end constructs; fed false data to ensure no issues with data processing. |
| System Testing | Testing supervisors, Testing personnel | 03/22/2021 | 04/9/2021 | Front and back end tied into website and mobile interface, Data base tied in to check flow of data within front and backend as well interface with data base. |
| Scenario Testing/Application | Testing supervisors, Testing personnel | 03/29/2021 | 04/16/2021 | Various scenarios ran; system performance monitored. Stress testing applied; smoke testing applied. |
| User Acceptance Testing | Test supervisors, software architect/engineers, testing supervisors, Testing Personnel | 04/05/2021 | 04/16/2021 | Testing of whole interface from end user perspective; protected infrastructure launched to test how its domain handles. |
| **Prepare Production Environment** | Bring everything online in staged environment. | Project Software Engineers, Project developers (back end), System engineers, system architects. | 04/05/2021 | 04/09/2021 | After tests are complete, bring entire infrastructure online. |
| Bring system monitoring online | Project Software Engineers, Project developers (back end), System engineers, system architects | 04/12/2021 | 04/16/2021 | Hash out any domain issues; interface issues. |
| Check for errors | Project Software Engineers, Project developers (back end), System engineers, system architects | 04/19/2021 | 04/30/2021 | Check for any possible data leaks between interfaces; patch. |
| **Data Conversions** | Check for data leaks between web interface and database | Data conversion analysists, data mapping analyst, software developers, supervisory staff | 04/12/2021 | 04/16/2021 | Hash out any data leaks between database and rest of interface. |
| Check for data conversion issues between front end, back end, and database interfaces. | Data conversion analysists, data mapping analyst, software developers, supervisory staff | 04/19/2021 | 04/23/2021 | Run data through complete architecture to ensure the database table is receiving and sorting it correctly. |
| **Documentation** | Draft appropriate interface and documentation for developed software application; training material for both personnel and clientele must be generated. | IT Technical writers, Software developers (as consultants), testers (as consultants). | 04/21/2021 | 05/17/2021 | Thoroughly document how each developed system as designed by engineering/ architecture staff, incorporate interface notes. Write training material in how the software functions as well as how to properly use it. |
| **Training** | Training of support personnel system support and repair tasks | Developers, technical writers, engineers, IT support personnel | 04/05/2021 | 05/17/2021 | Same training time allotted for each branch of customer support. |
| Training for management level individuals in employee service and customer service. | Developers, technical writers, engineers, IT support personnel, lower management | 04/05/20214 | 05/17/2021 | Lower management brought into training to gain familiarity with the system to help with customer issues. This being the branch to deal with major issues, system malfunctions, and customer advisal for more in-depth issues. |
| Training for helpdesk and customer service personnel. | Developers, technical writers, engineers, IT support personnel.  help desk personnel | 04/05/2021 | 05/17/2021 | Direct customer support training, this includes any employees taking customer calls/email/chat, issuing help desk tickets, and resolving minor issues. |
| **Launch** | Launch of finalized application; application and mobile app made available to the public. | Supervisory staff, customer service staff, Lower management (Customer issues), Help desk staff | 05/10/2021 | 05/17/2020 | System comes online; Customers allowed to download final version of mobile app/use web application, customers allows to apply for various services, establish bank accounts, make deposits, and so on. |

**References**

Aebersold, K. (2020) Software Testing Methodologies Retrieved from https://smartbear.com/learn/automated-

testing/software-testing-methodologies/

AWS (2020) Monzo Case Study Retrieved from https://aws.amazon.com/solutions/case-studies/monzo/

Dolan, T. (2020) The Ultimate Guide to Software Testing Retrieved from

https://www.globalapptesting.com/blog/the-ultimate-guide-to-software-testing-how

Elliot, E. (Mar 10, 2019) Software Roles and Titles Retrieved from https://medium.com/javascript-

scene/software-roles-and-titles-e3f0b69c410c

Górska, A. (May 31, 2019) 7 Ways to Prepare for Seamless Deployment from Development to Production

Retrieved from https://clutch.co/app-developers/resources/7-ways-prepare-seamless-deployment-

development-production

Kanapi, H. (August 16, 2017) Top 10 Most Popular Software Development Job Titles Retrieved from

https://fitsmallbusiness.com/software-development-job-titles/

Langis, B. (June 25, 2019) 7 Most Important AWS Security Tools Retrieved from

https://www.cbtnuggets.com/blog/certifications/cloud/7-most-important-aws-security-tools

Mochal, T. (February 2003) Project implementation: Eight steps to success Retrieved from

https://www.techrepublic.com/article/project-implementation-eight-steps-to-success/

Rau, J. (26 Nov 2019) Use AWS Fargate and Prowler to send security configuration finding about AWS

services to Security Hub Retrieved from https://aws.amazon.com/blogs/security/use-aws-fargate-prowler-

send-security-configuration-findings-about-aws-services-security-hub/

Techopedia (August 11, 2020) Production Environment Retrieved from

https://www.techopedia.com/definition/8989/production-environment