

Web Design & Testing Project Plan

Overview

About WD LLC:

WD LLC aims to design and develop web applications and websites for its own clients such as ABC company. The company has created in 2007 in Seattle and has two branches in Pennsylvania, and California. The company has shareholders and employees assigning various tasks and responsibilities. Part of the company has hired independent contractors across the U.S to be part of the WD LLC as temp employees. The WD LLC has done several different small to big projects across the nation handling various tasks involving making and developing and designing websites and web applications. The WD LLC's clients' feedbacks proves the company's management team's credibility and stability.

Decision makers involved in the project:

- Jonathan McKenzie: Sales Manager
- Augustus Blankenship: Marketing manager
- Ivie Munro: SR. Executive manager
- Esme-Rose Miles: SR. Executive manager
- Raja Bridges: Project Team manager
- Ben Valencia: Web Developer
- Brax Sparrow: Web Designer
- Ibrahim Neal: Web Tester
- Mylah Sears: IT manager
- Cheryl Moyer: Database manger specialized in non-relational databases
- Dillan Parkes: Docker specialist

Problems need to solve:

This project is needed to start and plan because of the following technical and designing issues:

- The projects' layout is not responsive and requires to be realigned and redeveloped to be 100% responsive and loadable in the common web browsers.
- app's inaccessibility,
- The company's advertisements and promotions do not display.
- Site mapping problem,
- A few errors and validation issues.

Project objectives:

The primary objective of this project is to increase productivity of the ABC's app to function more consistent and to be maintainable according to the web content quality standards. The secondary objective of this project is to decrease the bugs and errors appears on the ABC's app, to remeasure the layout and structure of the ABC's app, to retest the ABC's app at the interface and back-end levels, and to redesign the ABC's app to be more responsive and accessible for its users to navigate and finally to capture metrics principles' guidelines.

The date specified in this project is varied by each phase of the project as it mentioned on the deadline's section of this project. The considered budget for this project is defined and agreed on mutually between the ABC's company and WD LLC as it is included on the budget section of this project plan.

Project Scope:

The functional requirements of the ABC's project include the interface requirements, the ABC's staff training requirements according to internal SOP AA-101, data compliance requirements, ABC app users' authentications' requirements, ABC's app quality assurance and security requirements.

The operational requirements for making the ABC's app are discussed and described as ABC's app's architectural to function as TIERS, the ABC 's app's security and authentications' measurements, and the hardware requirements implemented by the ABC's app's server to use load balancer. The ABC's app performance requirements are the ability to measure the quality of the written code, The ABC's app server configuration, the complexity of the ABC's app and its implemented code, and to properly testing the Expected/Actual ABC's app's 'user load' results.

Statement of Work:

| | |
|--------------|----------------------------------|
| Date | April 1st 2020 |
| Client | ABC company |
| Project name | ABC Web Design and Testing |
| Requested by | ABC company technical department |
| From | WD LLC |

Deliverables

- ABC's client individual account and login information.
- The ABC's app deployed on requested, purchased and custom domain.
- A backup copy of the ABC's app used and stored files.
- A reference document to show how to make updates on the ABC's app using an attached link to external libraries, packages, and dependencies.

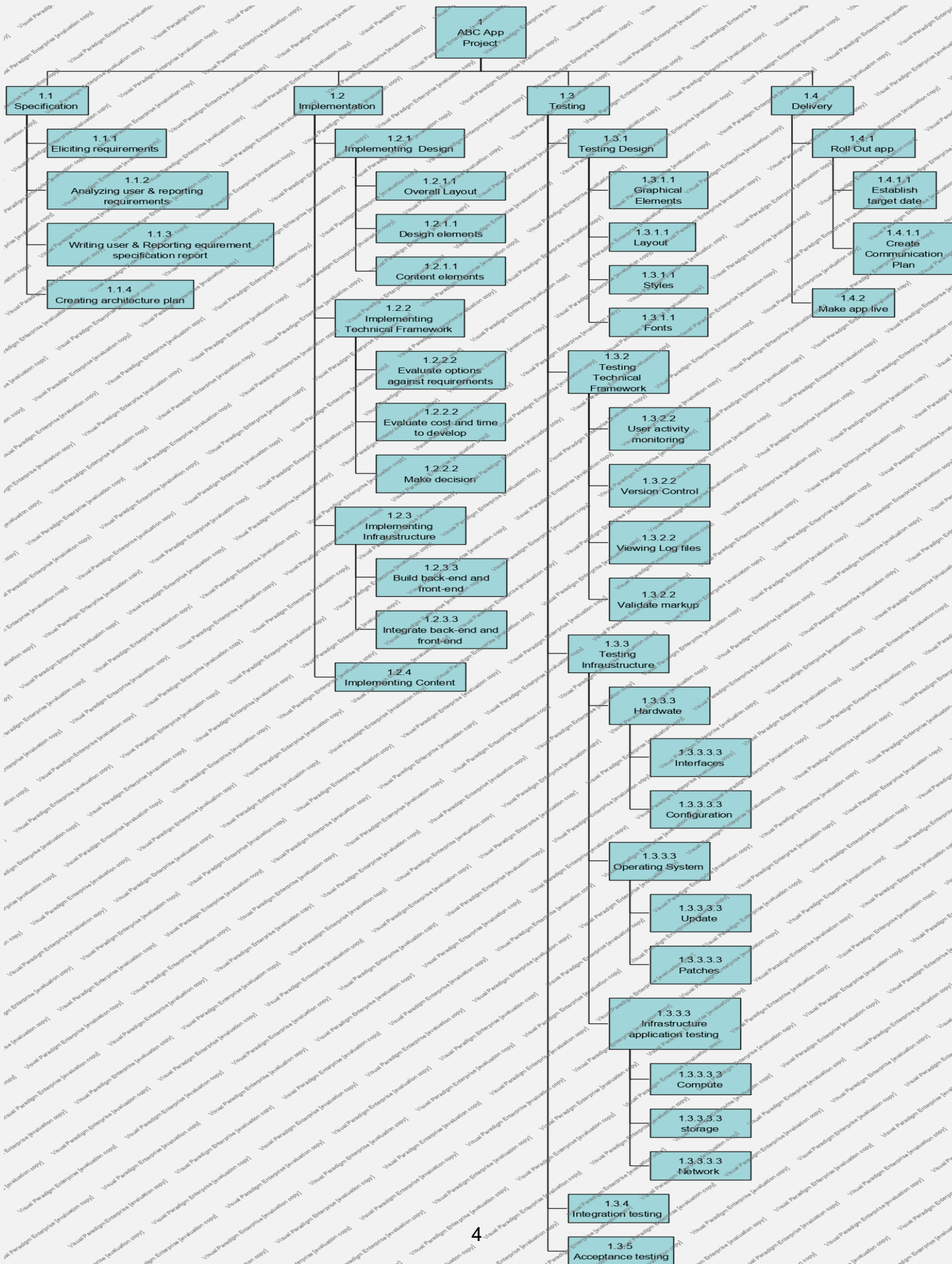
Acceptance: This plan will become completely legal and executable upon ABC's managerial technical department's acceptance to its terms and their signatures.

Target market:

The ABC's client is a small financial institution that has less than 500 employees and their clients as part of their memberships are required to create and have their account via using this application.

WBS

| Specification | Implementation | Testing | Delivery |
|---|--|--|---|
| Eliciting Requirements | Design Implementation <ul style="list-style-type: none"> • Content elements • Overall layout • Design elements | Testing Design <ul style="list-style-type: none"> • Graphical elements • Layout • Styles • Fonts | Roll out app <ul style="list-style-type: none"> • Establish target date • Create communication plan |
| Analyzing user requirements | Technical Framework Implementation <ul style="list-style-type: none"> • Evaluate options against requirements • Evaluate cost and time to develop • Make Decision | Testing Technical Framework <ul style="list-style-type: none"> • Validate Markup • Version Control • Viewing Logs • User activity monitoring | Make app live |
| Analyzing report requirements | Infrastructure Implementation <ul style="list-style-type: none"> • Build back-end and front-end • Integrate back-end and front-end | Testing Infrastructure <ul style="list-style-type: none"> • Application Testing <ol style="list-style-type: none"> 1. Compute 2. Storage 3. Network • Hardware <ol style="list-style-type: none"> 1. Interfaces 2. Configuration • Operating System <ol style="list-style-type: none"> 1. Patches 2. Update | |
| Writing user & report specification requirements | Content Implementation <ul style="list-style-type: none"> • Create content • Establish content details • Assign content creation • Create detailed content | Integration Testing | |
| Creating architecture Plan | | Acceptance Testing | |



Technology used on ABC's existing website:

- CRM,
- Marketing automation
- Data analytics
- Plugins
- Payment Processors

Goal

The goals set up for this project are specific as it determines the steps required to complete each task specifically. The tasks assigned to the project teams are measurable and well defined that clearly shows the amount of time and budget needed for each task. The project estimated result and expectations are realistic and are designed based on real and achievable outcomes. The goals set up for this project is also time-related and has a specific timeline for each task considered to be done.

The goals and purposes of this project lists as following:

- Correcting errors and overall optimization
- App's offline functionality testing and its completion
- CSS, JavaScript validation & optimization
- Optimize images & files weight
- Balance illustrations/images and text prioritization according to the ABC's client request
- Add visible search input to the navbar or to the top web app
- Security, database, and SEO testing.

Phases

- Preparation,
- Quote submission,
- Planning,
- Layout,
- Content preparation,
- Content Integration,
- Design,
- functionalities,
- Technical usability,
- Testing,
- Going live,
- Marketing and SEO,
- Launch,
- Maintenance,
- Optimization,
- Management Processes.

Design

- Graphical reception, update and resize such as (images, illustrations),
- Redesign navbar with clear statement of the site title & and prominently replace logo to link to main-page,
- Add a visible search input to the navbar,
- Redesign to have a clear navigation tool (such as Flash),
- Redesign main section (links and sidebars) and footer,
- Ensure that web body component is displayable at least for the web and app home-page,
- Rebalance illustrations/images and texts according to the ABC's client request,
- Set up a new 'advertising-ready' design & link,
- Redesign layout to display visible comments, reviews and client's feedbacks,
- Ensure content and design elements used attract visitors for future visitation or viral sharing,
- Ensure ABC's client information and contact credential are accessible instantly, including (address, phone number, email),
- Restyle lists and special text fields in terms of errors, and validation,
- Redesign buttons to ensure they change on hover and if they are clickable with no crash or error,
- Revalidate design and send result in a report to ABC if necessary

Keywords/SEO

Below are the new design implementations taken to make ABC's app and website accessible to its clients and prospect clients:

- Create a Sitemap using XML,
- Configure robot.txt,
- Submit ABC's URL to the search engines,
- Check formatting of ABC's website & app results in SERPs,
- Activate Ads buying and selling,
- Set-up email monitoring & alerts,
- Set-up an offline marketing feature,
- Social networking & marketing availability test for launch such as MySpace, Twitter, Digg,
- Launch ABC's special events/promotions, test, and its completion

Features and Functionality

These are the new features and functionality that the designing team implemented for ABC:

- Build a non-relational database,
- ABC's website and app' new E-commerce implementation,
- New file management system to keep ABC's clients' info safely and secured,
- New app notification (web site functionality & dependencies' updates),
- Customize applications & functionalities development,
- Revalidate users [ABC's clients] to require more validations to access password protected pages,
- Add a new feature for ABC's new clients to login as a guess with no registration requirement,

- ABC's first timetable update.

Risks Assessment Matrix

| Risk | Impact | Likelihood of occurrence | Degree of impact | Action on Trigger | Responsible |
|---|--|--------------------------|------------------|--|-------------|
| Two or more separate groups of developers work on developing parts of the app being delivered | <ul style="list-style-type: none"> • Redundancy occurrence • Estimated labor costs increases | H | H | Additional skilled developer(s) or resources are readily available if such problems occur on the project | Raja |
| The development team is unfamiliar with the assigned environment to be used | <ul style="list-style-type: none"> • Forces the project team to learn new hardware, new programming languages, development tools, and methodologies | M | H | Adjustments in planning may be required to handle this situation. | Ivie |
| Lack of the project team correct skills or inoperable skills at the proper level to complete the needed work | <ul style="list-style-type: none"> • Delay on the project completion time and schedule • Extra skill training increases the estimated budget and schedule • Usage of old-outdated skills affect the app operational process | H | H | The team must be staffed with the right mix of skills needed at specific points preferably at the beginning of starting the project. | Esme-Rose |
| Hardware, software, [dev] dependencies incompatibility | <ul style="list-style-type: none"> • Affect the app development cycles, especially during the coding and testing stages | H | H | Choose a right platform, [open] sources, libraries to handle the workload required to complete the project | Ivie |

| | | | | | |
|--|--|-----|---|--|-----------|
| Size of the project | <ul style="list-style-type: none"> • Delay in planning and the project team coordination • Potential for serious cost overruns | Low | M | Extra time should be estimated and consider at the planning stage to handle the situation when the project is larger than the team has previously worked on. | Esme-Rose |
| Lack of support for a specific project defined goal or approach | <ul style="list-style-type: none"> • Affect project at different scales from requirements gathering to testing • Affect The project schedule and quality of the product to inevitably suffer | Low | H | The project will receive the necessary level of support in terms of using right maintenance and the app upgrading approach | Augustus |

Accessibility

These are all the new ABC's app and website accessibility requirements:

- Reassure the ABC's URL is meaningful & user-friendly,
- If navigation or new design crashes the app or breaks a browser's, provide customized 404, 500 page as an alternative,
- Cross-browser optimization,
- Ensure that visitors receive a confirmation message or an alert after each request,
- Ensure ABC's website is print-friendly,
- (X)HTML validation & optimization,
- CSS validation & optimization,
- JavaScript validation & optimization,
- Optimize the website for graceful degradation,
- Optimize images & files weight,
- New protections measurements & access functions such as anti-spam, compression, caching, anti-hotlinks,
- Reevaluate ABC's website and app's database security such as a proper getaway

Ongoing Support and Maintenance

Upon completion of the ABC's project, these are the outlines for maintenance and support that WD LLC will provide to its client [ABC]:

- All kind of webmaster activities including content feedback & update, new products, calendar updates.
- Using gallery of photos as a new functionality,
- Build, monitor, respond to ABC's clients and feedback and reviews,
- Data Collection such as web stats and Analysis,
- Links optimization, to remove or replace dead links,
- SEO & Pagerank including updating each page component's title, keywords, tags,
- New ABC's URL's submission to search engines,
- Sitemap update,
- Social networking & marketing ready for launch,
- Security Backups,
- ABC website redesigns and makeovers

Activity Costs

The temporary nature of the ABC project requires that a well-defined budget is in place and that it is actively managed to keep the project growing and progress based on the below estimated activity costs.

| id | Task | Name | Workdays | Labor Rate VR | Standard Rate | Labor Costs | Material Costs | Travel Costs | Total Costs |
|-----|--|---------|----------|------------------|---------------|-------------|----------------|--------------|-------------|
| 101 | Correcting errors and overall optimization | Brax | 17 | \$150 | \$1150 | \$1000 | \$200 | | \$1,200 |
| 102 | Testing optimizations and completion | Ibrahim | 4 | \$240 | \$1620 | \$1600 | \$100 | | \$1,700 |
| 103 | CSS, JavaScript validation & optimization | Ben | 2 | \$180 | \$1840 | \$1750 | \$150 | | \$1,900 |
| 104 | Optimize images & files weight | Ben | 1 | \$120 | \$480 | \$380 | \$120 | | \$500 |
| 105 | Balance illustrations/images and text prioritization according to the ABC's client request | Ben | 4 | \$90 | \$970 | \$750 | \$250 | | \$1,000 |
| 106 | Website & app layout scalability tests | Ibrahim | 5 | \$120 | \$510 | \$550 | | | \$550 |

| | | | | | | | | | |
|-----|---|-----------|----|-------|--------|--------|-------|-------|--------|
| 107 | Security testing | Esme-Rose | 10 | \$90 | \$2470 | \$2100 | \$400 | | \$2500 |
| 108 | Web functionality & maintenance | Ivie | 2 | \$30 | \$740 | \$610 | \$140 | | \$750 |
| 109 | Database testing | Cheryl | 4 | \$210 | \$1030 | \$920 | \$180 | | \$1100 |
| 110 | Server configuration installation & management | Dillan | 10 | \$15 | \$895 | \$640 | \$260 | | \$900 |
| 111 | IT & technical support | Mylah | 2 | \$15 | \$795 | \$550 | | \$250 | \$800 |
| 112 | Monitoring SEO, metrics, and customer reviews | Augustus | 3 | \$90 | \$970 | \$850 | \$150 | | \$1000 |
| 113 | Collaborating with content developers and ABC executives, budgeting | Jonathan | 2 | \$105 | \$765 | \$670 | | \$130 | \$800 |

Assumptions

WD LLC assumes the employees listed below are responsible for the completion of the ABC's project for doing certain tasks:

Ben Valencia: Project evaluation (results/plan, goals achievement, etc.)

Ibraheem Neal: SEO review (2-4 months after going live)

Esme-Rose Miles: Revised marketing plan & budgeting

Augustus Blankenship: Documentation updates

Raja Bridges: Ongoing roles and responsibilities

Cheryl Moyer: Security Backups

Schedule

Each step of completion of the ABC project has a well-defined beginning and end as described below:

| Id | | Task | Resp-Name | Estimate/ H | Earliest | | Latest | | Total | Actual Finish |
|-------|--|--------------------------------------|-----------|-------------|----------|-----|--------|-----|-------|---------------|
| | | | | | Start | End | Start | End | | |
| 101 | | Analysis tasks | | | | | | | | |
| 101-1 | | Define user requirements | Brax | 3 | 1 | 12 | 1 | 12 | 0 | |
| 101-2 | | gather data | Cheryl | 2 | 12 | 14 | 13 | 15 | 1 | |
| 101-3 | | analyze data | Cheryl | 3 | 15 | 17 | 16 | 18 | 1 | |
| 101-4 | | develop business requirements report | Raja | 5 | 18 | 21 | 19 | 21 | 1 | |

| | | | | | | | | | |
|-------|---|-----------|----|----|----|----|----|---|---|
| 101-5 | develop technical requirements report | Mylah | 5 | 21 | 23 | 22 | 23 | 1 | |
| 101-6 | Creating architecture plan | Raja | 3 | 23 | 25 | 24 | 26 | 1 | |
| 102 | Design Task | | | | | | | | |
| 102-1 | develop site map | Ben | | | | | | | 2 |
| 102-2 | develop storyboard | Ben | | | | | | | 1 |
| 102-3 | develop navigation map | Ben | 2 | 26 | 30 | 26 | 30 | 0 | |
| 102-4 | document and submit design | Raja | 3 | 30 | 33 | 30 | 33 | 0 | |
| 103 | Implementation tasks | | | | | | | | |
| 103-1 | develop templates | Brax | 2 | 33 | 35 | 33 | 35 | 0 | |
| 103-2 | develop navigation systems | Brax | 4 | 35 | 36 | 35 | 36 | 0 | |
| 103-3 | develop scripts | Brax | | 36 | 40 | 38 | 42 | 2 | |
| 103-4 | develop multimedia elements | Brax | 4 | 42 | 44 | 42 | 44 | 0 | |
| 103-5 | develop components | Brax | 16 | 44 | 51 | 47 | 51 | 3 | |
| 104 | Testing Tasks | | | | | | | | |
| 104-1 | test against technical requirements | Ibrahim | 6 | 52 | 53 | 52 | 53 | 0 | |
| 104-2 | conduct usability testing | Ibrahim | | 53 | 56 | 54 | 57 | 1 | |
| 104-3 | conduct client acceptance test | Ibrahim | 2 | 57 | 62 | 57 | 69 | 7 | |
| 105 | Installation Tasks | | | | | | | | |
| 105-1 | Installing Website to the web server | Dillan | 2 | 69 | 72 | 69 | 72 | 0 | |
| 105-2 | Ensuring all configuration parameters are set correctly | Dillan | 3 | 72 | 76 | 72 | 76 | 0 | |
| 105-3 | Set up extra features [Security] | Esme-Rose | | | | | | | 4 |
| 106 | Maintenance | | | | | | | | |
| 106-1 | Adding new content to pages | Esme-Rose | 3 | 76 | 82 | 77 | 82 | 1 | |
| 106-2 | Deleting content | Ivie | 2 | 82 | 85 | 82 | 85 | 0 | |
| 106-3 | Altering-Updating content | Esme-Rose | 3 | 85 | 88 | 86 | 88 | 1 | |
| 106-4 | Making changes to website functionality | Ivie | | | | | | | 2 |

| | | | | | | | | | |
|-------|---|-----------|---|----|----|----|----|---|---|
| 106-5 | Server reconfiguration | Dillan | 4 | 88 | 89 | 88 | 89 | 0 | |
| 106-6 | Adding-changing web server features | Dillan | | | | | | | 3 |
| 106-7 | Interfacing with other systems | Esme-Rose | 5 | 89 | 90 | 89 | 90 | 0 | |
| 107 | Marketing | | | | | | | | |
| 107-1 | Monitoring SEO | Augustus | | 90 | 91 | 90 | 91 | 0 | |
| 107-2 | Monitoring metrics | Augustus | | 91 | 92 | 91 | 92 | | |
| 107-3 | Managing customer reviews | Augustus | | | | | | | 1 |
| 108 | Sales management | | | | | | | | |
| 108-1 | Developers collaborations management | Jonathan | | 92 | 93 | 92 | 93 | | |
| 108-2 | Budgeting | Jonathan | | | | | | | 1 |
| 108-3 | ABC executives & management teams' collaborations | Jonathan | | 93 | 94 | 94 | 95 | 1 | |

Closing

| Internal post project evaluation process including private and group meetings | Question discussed in post-project evaluation | Responses received from ABC client project team members | Lessons learned |
|--|--|--|--|
| Individual meetings <ul style="list-style-type: none"> Raja Bridges program manager and Ben Valencia was involved on 01/15/2020 to review the progress made and the errors that need to be fixed. Raja Bridges program manager and Brax Sparrow to implement the ABC's UI, new design responsiveness, and fix the | <ul style="list-style-type: none"> Program manager, Raja Bridges, set up various post-project individual and group meetings with the ABC client's project team to discuss about the lesson learned and the points they must consider in future. Program manager, Raja Bridges asked questions from Ben Valencia to whether to install the latest library as a dependency rather than using the old | <p>Cheryl Moyer, Brax Sparrow, and Ben Valencia prepared their answers in response to Raja Bridges of ABC client app project manager, in a written document to be filed and archived as a record in the future to be used.</p> <ul style="list-style-type: none"> Ben Valencia prepared a written document in response to Raja Bridges, program manger of ABC client project to confirm | <ul style="list-style-type: none"> Members learned how to communicate in a more convenient way to deliver their messages and ideas via internet using cloud-based or an online communications resource. Member learned all the possibilities they might have to cut off the project budget by removing all the |

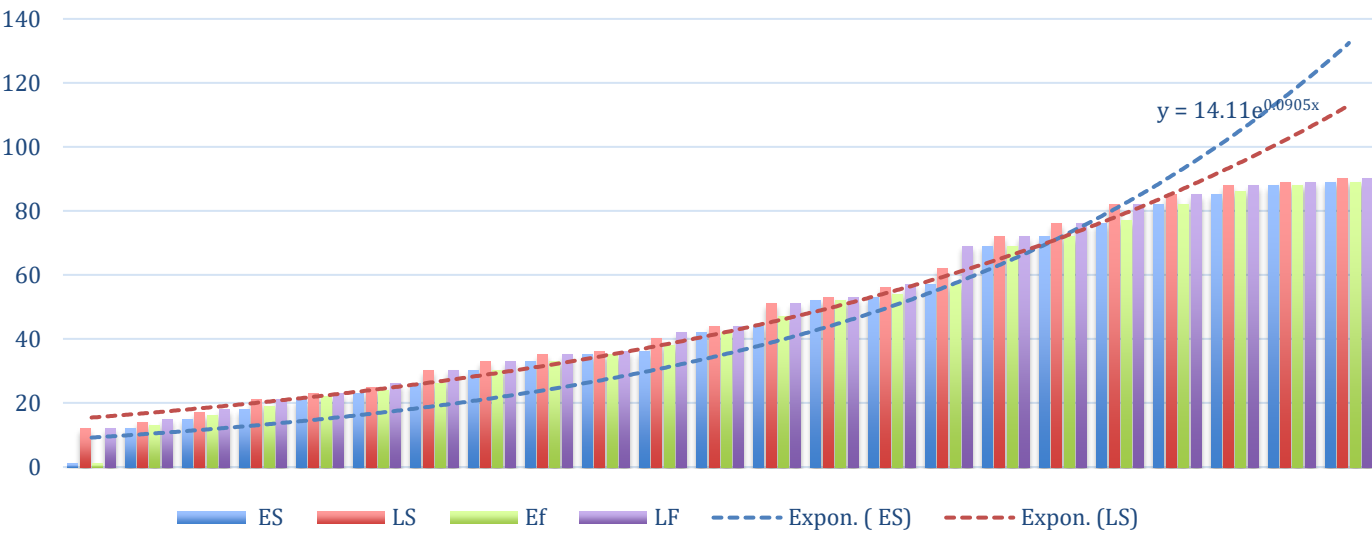
| | | | |
|---|---|--|---|
| <p>current bugs on the app.</p> <ul style="list-style-type: none"> • Raja Bridges program manager and Ibrahim Neal to run the ABC app tests to ensure it catches all the potential errors and throw exceptions as needed correctly. • Raja Bridges program manager and Cheryl Moyer to verify the installed database configuration and security and performance. | <p>version of it to compare each of them performances and compatibility on the ABC client's app.</p> <ul style="list-style-type: none"> • Program manager, Raja Bridges asked questions from Brax Sparrow to see if using an external library is a better way to install than the specific associated library available for ABC type of app. • Program manager, Raja Bridges asked questions from Cheryl Moyer to see if it's more proper to use a non-sql database instead of a sql database on ABC client and similar apps. | <p>on using a new dependency on similar apps in the future and explained about the advantages of it in detail.</p> <ul style="list-style-type: none"> • Brax Sparrow prepared a written document in response to Raja Bridges, program manager of ABC client project to reject his idea of using another library for designing purposes rather than the one associated with that specific application type and explained about the disadvantages of doing so in detail. • Cheryl Moyer prepared a written document in response to Raja Bridges, program manager of ABC client project to confirm Raja's idea on using a non-sql database instead of the current sql database for the similar project in the future and explained about each of them comparison in detail. | <p>unnecessary services and costs.</p> <ul style="list-style-type: none"> • Members learned how to implement a faster web and mobile applications by not using outdated resources and libraries that are depreciated. • Members learned how to use specific libraries that are associated to the specific app type by avoiding using or importing any unrelated libraries that can't be used to help saving their time and efforts. • Members learned how to accelerate project performance by using a faster method of implementing servers on client's applications. • Members came up with new ideas of implementing a non-sql based of database and replaced it with the current sql based in the future. |
| <p>Group Meetings</p> <ul style="list-style-type: none"> • Raja Bridges program manager met with the project team in their initial meeting to | <ul style="list-style-type: none"> • Program manager, Raja Bridges asked questions from the team to see if in overall there were ways for the team to finish | <ul style="list-style-type: none"> • In a group meeting, all members discuss about the possible ways to accomplish their tasks in earlier time schedule | |

| | | | |
|--|--|---|--|
| <p>prepare the ABC's project plan.</p> <ul style="list-style-type: none"> • program manager met with the project team in their initial meeting to prepare the ABC's project schedule and budget. • program manager met with the project team in their initial meeting to assign each members' tasks and responsibilities. • program manager met with the project team in their initial meeting to check on the team progress and signed the team initial progress report. • program manager met with the project team as a second follow up meeting to ensure the ABC project's perspectives and goals are met and signed the third team progress report. • program manager met with the project team to discuss about the final progress report to close up the project and to deliver the | <p>ABC project earlier than the time estimated.</p> <ul style="list-style-type: none"> • Program manager, Raja Bridges asked questions from the team if there were some ways to reduce the budget down to \$2000 less in the future to eliminate unnecessary services in the future. • Program manager, Raja Bridges asked questions from the team, whether if it was possible to accelerate ABC client's project to perform faster in a higher speed than they estimated using another external library. • Program manager, Raja Bridges asked questions from the team if there is a way to check the ABC client app vulnerability check to use that method as a reference on future similar projects. | <p>and came up with ideas to implement in the future in a written document to be archived as a company's performance record.</p> <ul style="list-style-type: none"> • In a group meeting, all members discuss about the possible ways to cut off the unnecessary services to save up more budget and came up with useful ideas in the future in a written document to be saved as a company's performance record. • In a group meeting, all members discuss about the possible ways to find a faster server options than current used one and documented their research to be used as a company team performance record in the future similar projects. • In a group meeting, all members discuss about the possible ways to find an appropriate way to check their clients' apps vulnerability tests and documented | |
|--|--|---|--|

deliverable to
the ABC client.

their research to
be archived for
later to be used.

ES,LS,Ef,LF



ES,LS,Ef,LF

■ LS
 ■ Ef
 ■ LF
 ■ ES
 - - - Expon. (Ef)
 - - - Expon. (LF)

