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| **Project Name** | There’s an App for That! | **Project Number** | SET\_96055.2 |
| **Project Team # and Name** | Team 1, Shade Leaf Engineering & Consulting | **Prioritization** | High |
| **Owner(s)** | Green Man’s Pantry;  Shade Leaf Engineering & Consulting | **Start Date** | OCT 2020 |
| **Scheduled Completion Date** | NOV 2021 |

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| Mission/ Purpose | Green Man's Pantry is an international vegan food distributor, specializing in both vegan and raw vegan goods with a touch of ayurveda practices, that has been using an outdated ERP system of integrated software applications across finance, human resources, procurement, distribution, and other departments. At the time, this internal process was state of the art, however over time and with increasing advances in technology, the system is becoming ever increasingly slow, is full of data processing bugs, and is unappealing, creating delays with purchase orders, shipment tracking, and invoicing of product between the company and its business partners. Green Man's Pantry, and its Stakeholders, have chosen to replace its ERP system, and move into a modern EDI approach of handling their procurement platform, with use of mobile application technology, providing planning and project management, sourcing and contract management, supplier management, order management, invoicing management, shipping management, audit logs and custom reports, partnering with Shade Leaf Engineering & Consulting, to streamline the process so that supplier issues can be tracked more efficiently through a single, easy to use interfaced, web portal--with Tablets & Smartphones being the critical platforms. The name of the project is called There's an App for That!, and the application will be called Green Man Pantry’s Portal. This new application will speed up order processing response times, improve invoicing and shipment tracking, generate custom reports, sync sourcing opportunities, and manage supplier information, projecting a substantial increase in revenue, while also increasing Shade Leaf Engineering & Consulting presence within the industry. | | | | | | |
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| **Project**  **Description and Project Product** | Shade Leaf Engineering & Consulting’s project, There’s an App for That!, will see the creation of a software application for the client, Green Man’s Pantry, which will be called Green Man’s Pantry Portal. This application will optimize the business processes of Green Man’s Pantry by primarily integrating mobility and cloud & database technologies into the business processes of Green Man’s Pantry. The project will see the production of a web-based application that will be optimized for Tablet and Mobile use, along with a website, as part of future product design. It will have an appealing graphical user interface on all mediums, from the mobile device to the computer. The application will also be connected to database servers and will utilize cloud technologies to produce faster processing times. These faster processing times are what will produce the faster response times and streamlined processes such as invoicing and shipment tracking, and information management such as supplier information. The mobility that comes from having a system that utilizes mobile and tablet features allows for employees to access information from the database quickly and from any location. | | | | | | |
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| Objectives | This project aims to provide the client, Green Man Pantry, with an application, optimized for mobile and tablet use, with an accompanying website, that will optimize the business processes of the company. The objective will be met by achieving the following goals:   * Designing a mobile application with an appealing User Interface and User Experience   + This will include consulting with Green Man Pantry for design features to be included and potentially designing multiple templates to meet the specifications of the client. * Extending the mobile application and its interface by developing the software to also be used on a tablet * Connecting the designed application to a database server that will store company information that will include but is not limited to:   + Customer Information   + Supplier Information   + Shipment Information   + Invoice Information * Configuring cloud technologies such as Google Cloud, Amazon Web Services, or Microsoft Azure to speed up various data processing throughout the application. * Adding location services for efficient shipment and invoice tracking. * Building out a website to accompany the mobile and tablet applications for computer use. | | | | | | |
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| **Business Need** | It is the goal of this goal to reduce the financial overhead of this company and utilize modern technological practices to increase productivity in the workplace. By monitoring in the field in real time, operational deficiencies can be corrected before they cause negative impact events. By controlling all aspects of the app from the ground up, the customer will be free of expensive licensing agreements that may cause an undue burden on the liquidity of cash flow.    This project will reduce operational overhead and help eliminate redundant and inefficient workforce. The app will also allow real-time updates of customer information so real-time changes may be performed. By making these changes on the fly, the customer will get their correct orders on time and reduce the cost of shipping return merchandise or losing it to spoilage or other effects. In the field warehouse operations will ensure the proper merchandise reaches the proper truck and minimize overall costs of logistical support. No longer will paper copies have to be verified and re-verified, be prone to error or get lost for various reasons. By having a virtual copy, it will be possible to have every at the same place in every stage of product delivery.    With this app, as soon as the product is delivered, records are updated and invoices shipped to the customer. No longer will the customer’s invoice be at the mercy of the United States Postal Service or other carrier. By utilizing a digital invoicing system, the company will save on postage and/or shipping to let the customer know when payment is expected. | | | | | | |
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| **Milestones** | | | The project, There's an App for That!, will be submitted in accordance with the milestone schedule below. Upon approval of the project charter, resources will be assigned to the project and work will commence within three business days. The Project Executive must approve any schedule changes which may impact  the milestones. A detailed schedule will be included in the project charter. The high-level milestone schedule is:   1. Customer Specifications (10/26/20 – 10/30/20) 2. Hardware requirements (11/2/20 – 11/13/20) 3. Internal requirements (11/16/20 – 12/04/20) 4. Allocating resources (12/07/20 – 01/29/21) 5. Development (02/01/21 – 04/30/21) 6. Alpha Testing (05/03/21 – 07/02/21) 7. Beta Testing (07/05/21 – 07/30/21) 8. Customer Demo (08/02/21 – 08/06/21) 9. Final Testing (09/07/21 -10/29/21) 10. Release Date (11/1/21)   . | | | | |
| **Budget** | | | The order of magnitude for this project, There’s an App for That!, including personnel charges, is $1,200,000.00, as outlined in the below chart, which are expected to be charged to Green Man’s Pantry Human Resources Department in separate monthly installments by the Project Executive to Shade Leaf Engineering & Consulting. Additional budget money will be available upon request by the Project Executive and approved.   |  |  | | --- | --- | | **Software Development Budget** | **Total Costs** | | **Development costs** |  | | Development labor | $100,000 | | Software licenses | $200,000 | | Server software | $100,000 | | 15 servers @ $12,000 | $200,000 | |  |  | | Printer | $25,000 | | Other equipment | $250,000 | | Testing | $100,000 | | Training | $25,000 | | Supplies | $50,000 | | **Total development costs** | $1,050,000 | | **Operational costs** |  | |  |  | | Hardware | $50,000 | | Software | $75,000 | | Operational labor | $25,000 | | **Total operational costs** | $150,000 | | **Total Estimated Costs** | $1,200,000 | | | | | |
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| **User Acceptance Criteria** | | | | | Green Man's Pantry has partnered with Shade Leaf Engineering & Consulting to develop a customized mobile web presence for its distribution company and trading partners. This project will be monitored and measured not only through web meetings, conference calls, and onsite meetings, but also through a waterfall/agile approach consisting of the following phases: analysis, design, code, test, display, and maintain--where not only the core team, development team, and project managers, but also the stakeholders will submit any work done towards the project through an agile framework called SPRINTS. This project will be successful when the following conditions are met:   * Analysis and Planning is completed with all personal, including stakeholders, project executive, business and product owner, subject matter experts, development team, and external consultants, to create the project plan and software requirements needed for the development of the procurement platform web portal--with requirements being fully documented. * System Design is completed, including Specialized Login Module Design, Admin Module Design, New Partner Sign-up Module Design, Template Module Design, Purchasing Module Design, Shipment Tracking Module Design, Billing Module Design, Accounts Receivable Management Module Design, Sourcing Management Module Design, Customer & Personnel Management Module Design and Reports Module Design. * Code Phase is completed, including Login Module Design, Admin Module Design, New Partner Sign-up Module Design, Template Module Design, Purchasing Module Design, Shipment Tracking Module Design, Billing Module Design, Accounts Receivable Management Module Design, Sourcing Management Module Design, Customer & Personnel Management Module Design and Reports Module Design. * System Testing is completed, including Unit Testing, Integration Testing, System Integration Testing, Functional Testing and Go Live Testing, all functionality meets client's business requirements, partners business requirements and ANSI X12 Standards for transaction sets--and all partnerships have been established between the client and its entire list of trading partners. * User can access a functioning mobile application, with account login, logout and password reset features. The web portal page should also contain informational information and the distribution company, its partners, and onboarding instructions. Name of Mobile App Widget: Green Man’s Pantry * Distributor can login to the web portal page, view partners; track partner visits; sync list of potential prospects; schedule and route shipments; track shipments, receipt of shipments, orders, receipt of orders, order delays, invoicing, receipt of invoicing, invoicing delays; manage accounts receivable, post receipt of payments; manage inventory. * Distributor can login to the web portal page, manage company personnel system privileges; verify, create, edit and delete system templates, and announcements; and view and print documents for all processes. * Partner can access the account signup page, entering user information, i.e., username/password/email; company profile information, i.e., company name, address; billing information, i.e., credit card information or invoice billing; and select document types that will be processed to the distributor, i.e., 850, 875, 810, 880, 856, 997, etc. * Partner receives a system response, auto-generated email, that informs them of the account signup being completed and that additional training documents will be received shortly. * Partner can login to the web portal page, manage company personnel system privileges; verify, create, edit and delete system templates, and announcements; begin sending purchase orders, track shipments, receive invoices and view and print documents for all processes. * User documentation and training standards for navigation, accessibility, and compliance, containing policies, business partner requirements, ansi standard requirements and governance regulations are developed, along with side sets of documentation with recommended priorities of future development works. | | |
| |  |  |  | | --- | --- | --- | | **High-Level Project Assumptions** | | The following project assumptions are to be considered for the project There’s an App for That! and its associated application, Green Man Pantry’s Portal:   1. The company will have sufficient funding. 2. The company will have necessary resources when needed. 3. Individuals will have access to resources without delay so that tasks may be completed on time. 4. Costs will not change during the project cycle. 5. Equipment will not break during the project cycle. 6. There will be enough customers who want the product. 7. Laws and regulations will remain the same through the project cycle and will not cause the scope to change. | | **High-Level Project Constraints** | The mobile application platform program is expected to expedite processes and provide synergies just in time for the holiday season and must be functioning and online by NOV 2021. The platform will move through several phases of development: analysis, design, code, test, display and maintain. Design and development of the mobile application platforms user interface, credentials, template module design, purchasing module design, shipment tracking design, invoicing module design, accounts receivable management design, sourcing management design, trading partner and personnel management module design, reports management module design, and all partnerships must be established through valid ISA & GS IDs between the client, before formal approval of user  documentation and training initiatives. High-level constraints are listed below:   1. Project Timeline – In time for the next holiday season, i.e., NOV 2021 2. Project Budget 3. Labeling Laws – Many states have passed laws regarding the labeling of plant-based foods. These include Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Montana, North Dakota, Oklahoma, South Carolina, South Dakota, and Wyoming have all passed labeling laws restricting the use of the term meat. In many cases, violations could lead to criminal prosecution. User interfaces would need to restrict the use of meat-based names in the product name and keeping this current and up to date is critical under the Federal Food, Drug, & Cosmetic Act (FDCA). 4. Certified BeVeg - The client, Green Man's Pantry, is vegan certified. The client will need to produce up-to-date certification documents and submit them as part of the project. Certified BeVeg will need to be promoted, as well as implementing validation restrictions into the client's mobile application program as needed regarding regulations and laws, while also only using approved graphics by BeVeg. Informational at beveg.com 5. Certified Vegan - The client, Green Man's Pantry, is vegan certified. The client will need to produce up-to-date certification documents and submit them as part of the project. Certified Vegan will need to be promoted, as well as implementing validation restrictions into the client's mobile application program as needed regarding regulations and laws, while also only using approved graphics by Vegan Action. Information on vegan certification be found on Vegan.org and does have costs as shown below:  |  |  |  | | --- | --- | --- | | Fee Band | Annual Revenue | Annual Fee | | A | Up to $15000 | $150 | | B | Up to $100,000 | $250 | | C | Up to $250,000 | $400 | | D | Up to $500,000 | $600 | | E | Up to $999,000 | $1000 | | F | Over $1 Million | $2000 | | G | Up to $10 Million | $3000 |  1. Certified Vegan Society Trademark - The client, Green Man's Pantry, is vegan society trademark certified. The client will need to produce up-to-date certification documents and submit them as part of the project. Certified Vegan Society Trademark will need to be promoted, as well as implementing validation restrictions into the client's mobile application program as needed regarding regulations and laws, while also only using approved graphics by Vegan Society Trademark. Informational at vegansociety.com 2. Certified Organic - The client, Green Man's Pantry, is organic certified. The client will need to produce up-to-date certification documents and submit them as part of the project. Certified Organic awareness will need to be promoted, as well as implementing validation restrictions into the client's mobile application program as needed regarding regulations and laws, while also only using approved graphics by USDA. Informational at usda.gov 3. Certified Ayurvedic Chefs/Culinary Artists - The client, Green Man's Pantry, has incorporated certified ayurvedic chefs/culinary artists into its production processes, to use the healing power of food to bring health and wholeness to everybody. The client will need to produce up-to-date certification documents and submit them as part of the project. Certified Ayurvedic Chefs/Culinary Artists will need to be promoted, along with regulations and laws, while also only using approved graphics associated with the practice of Certified Ayurvedic Food Handling. 4. Quality Control  * Screen size, sensors and interactions - Mobile devices have small screen sizes, though tablets are moving to more laptop size screens. There are limited canvas spaces with some mobile devices, meaning the use of typing could be viewed as an inconvenience, with limited space and touch interactions of different elements. Other formatting variations to display content will need to be considered and planned for. * Network issues - The mobile product will have to contend with network latencies and failure points. To contend with these types of issues and increase a positive user experience will need to avoid blocking spinners and ensure the platform and design permits loading partial elements and cached data to keep the user occupied while waiting. The design platform will also need to optimize for walking in and out of Wi-Fi zones as this affects not just the software on the phone, but also the backend that supports the application. * Application updates - Making updates are incredibly hard for mobile applications, even the tiniest of changes. It's known that shipping even the smallest change takes on average of seven days to be approved by Apple. Also, the data sits client side, meaning users must go in and download the updates manually. If changes don’t perform as expected (driving wrong user behaviors, introducing bugs, etc.), fixing the issue immediately can be extremely difficult, in addition to waiting for additional review processes and slow user adoption.  1. Customer Satisfaction 2. Slow deliveries of product could impact timelines 3. Prices on resources could shift due to a volatile market 4. EDI transactions with the United States must conform to X12 EDI standards and require compliant, quality software for translation. These standards allow companies to communicate and transfer documents from business-to-business without incompatible software or unsecure connections that leave proprietary data vulnerable to outsiders. The five functional transaction sets and subsets include: communications & control, finance, transportation, supply chain and insurance--with subsets defined as HIPAA - Health Insurance Portability and Accountability Act, UCS - Uniform Communication Standard, VICS - Voluntary Interindustry Commerce Standards, AIAG - Automotive Industry Action Group, CIDX - Chemical Industry Data Exchange, EIDX - Electronics Industry Data Exchange Group (CompTIA) and PIDX - American Petroleum Institute. The client, Green Man's Pantry, at this time is assumed to fall under the grocery industry subset UCS - Uniform Communication Standard, however further analysis will need to be completed. | | | **Exclusions and Boundaries** | | The following exclusions are to be considered for the project There’s an App for That! and its associated application, Green Man Pantry’s Portal:   * Green Man Pantry’s Portal will not be a communication application. The only exchange between suppliers and customers is through the use of invoice information and tracking information. Further communication must be made through other means. * Green Man Pantry’s Portal’s Initial builds will not include high-level business analytics. The portal is being designed primarily for business tracking and mobile access. Future builds could see analytics implemented but initial builds will not see that feature. * Green Man Pantry’s Portal’s Initial builds will not address internal company workings for departments such as Human Resources. Its primary focus will be incoming and outgoing business processes. Future builds may add in multi-department features; however, initial builds will not do so. * Green Man Pantry’s Portal’s Initial builds will not include Auto-AI features such as automatic order replenishment. Future builds could see implementing certain AI features in steps, but initial builds will not include this feature. * Green Man Pantry’s Portal will not serve as a shopping marketplace. The application is being designed as a business tool to serve the distributor. For all end customer and retail front needs, a separate site should be available, not provided through the project portal. * Green Man Pantry’s Portal’s Initial builds will not include any marketing features, including the use of any social media, or entertainment features. * Green Man Pantry’s Portal’s Initial builds will not include offline viewing and download abilities. In order to keep data displaying with real-time accuracy, the system must be connected online to be able to access the databases accordingly. Future builds may see the addition of this feature; however, initial builds will not include it. * Green Man Pantry’s Portal’s visibility for third party services, such as brokers or third-party logistics, will be limited by the level of integration of these third-party service-providers. | | | | | | | | |
| **Major Risks** | | The following major risks are to be considered for the project There’s an App for That! and its associated application, Green Man Pantry’s Portal:   1. Catastrophic Risk – i.e., Hurricane, Flash Flood, Forest Fire, Tornado, etc. destroys the facility, delays shipments, delays processing of orders/invoices 2. Loss of Interest in Vegan Products, not enough resources for plant-based foods due to waste of edible plant products of field yielders 3. Choosing the wrong methodology and failing to see certain limitations 4. Possibility of state shutdown, COVID, etc. 5. Product could become contaminated 6. State could issue recalls on product 7. Limited supplies | | | | | |
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| KEY STAKEHOLDERS | | | | | | | |
| **Project Executive Authority Level** | | | | The **Project Executive** has ultimate authority over the project. The project executive leads the team in planning and implementing the project from initiation to closure. The responsibilities include providing resources, scope and change management, keeping the project plan current (deliverables, schedule, and resources), issue and risk management, maintaining project documents, reporting project status, facilitating conflict resolutions within the project and between cross-functional teams, help resolve escalated issues, approve scope changes, approve major deliverables, and provide high-level direction.    **Name: Joshua Kidder – Project Executive** | | | |
| **Project Core Team** | | | | **Core Team Members** are accountable for ensuring successful contribution for defined area of responsibility, representing their functional area for project activities and are the functional representatives responsible for project decisions, ensuring cross-functional representation and collaborative project execution. The responsibilities include making project-level decisions on behalf of their function or area of expertise, enlist the support of other resources and from extended teams, negotiate functional resource needs and assignments, provide leadership and direction to extended team members and maintain responsibility for functional area's performance and budget. | | | |
| **Project**  **Development Team** | | | | **Core Dev Members** are accountable for designing and building software products required by the product holder and stakeholders, as well as providing functional and subject matter expertise as needed, executing project tasks in accordance with the project plan, rendering professional opinions outside the core competencies of the core team, working closely with colleagues, sharing best practices, and working together to resolve issues. These responsibilities include planning, testing, analysis, programming, throughout the course of the project, up-to including multiple aspects of the software development process.  **Name: Joshua Kidder - Architecture Owner; Joshua Kidder - Agile Team Leader; Joshua Kidder, Syed Asghar, Jim Brank, Mack Najorka - Development Team Members; Joshua Kidder, Syed Asghar, Jim Brank, Mack Najorka - Specialists** | | | |
| **Subject Matter Experts (SMEs)** *(What resources will you need with special expertise?)* | | | | **Subject Matter Experts** are accountable for providing the knowledge and expertise in a specific subject, business area, or technical area for the project, ensuring the facts and details are correct so the project's deliverables will meet the needs of stakeholders, legislation, policies and standards; as well as executing project tasks in accordance with the project plan, rendering professional opinions outside the core competencies of the core team and development team, working closely with colleagues at all levels as needed, sharing best practices, and working together to resolve issues. These responsibilities include supporting the definition of processes and policies, supply business rules and procedures, and communicate the contexts in which the rules, processes and policies are applied; accurately represent business units' needs to the project team; validate requirements and deliverables that describe the product or service(s) that the project will produce; bring information about the project back to the customer community; provide input into and create/execute user documentation and training material; test the product or service(s) towards the end of the project (go live testing), using and evaluating for accuracy and usability, providing feedback to the project team; guide professionals on the project to ensure the content is accurate; resolve issues relevant to the project deliverables and obtain or provide approval for changes to rules, processes and policies.  **Business analytics, Cybersecurity, Regulatory compliance, Database administrators, Build masters, Information security professionals, User experience experts, and Quality analysis specialists** | | | |
| **Stakeholders** | | | | **Stakeholders** set and communicate the requirements of the product, including which features and capabilities are needed, which security and privacy settings are essential, and ease of use factors, acting as the voice of the customer. Their responsibilities include scheduling and approving priorities, updates, and issues that emerge during the development process, provide timely responses to queries, providing team members with access to expert stakeholders, communicating project statuses, represent work of the agile team collaboratively amongst stakeholders, demonstrate software programs collaboratively amongst stakeholders and collaboratively educate amongst stakeholders about the development process.  **Those funding the project, Product owner, Senior managers, Portfolio managers, Supervisors, Operations staff, Direct end users, Indirect users & DeVry faculty members** | | | |
| **APPROVALS** | | | | | | | |
| Type Name | | | | | | Signature | Date |
| Project Executive Approval | | | | | |  |  |
| **Product Owner Approval** | | | | | |  |  |