Presented by:

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Smart Shopper

Group 10

February 26, 2016

# **Smart Shopper**

## **Executive Summary:**

Smart Shopper will help customers shop groceries without preparing purchase list and also help retail store to manage inventories. Our primary objective is to develop a customer concentric application which shows the list of products to be purchased, purchase history and suggests products based on the individual shopping pattern/history. The application identifies the purchase pattern of the user by analyzing the previous purchase history and suggest the required products. The user can also set patterns manually to make the system more efficient. The application also shows products required for near future (e.g. 10 days) helping users to purchase them in advance, if there is an offer on that product. In addition to customer benefits, the application also helps to manage inventories for retail stores. Stores can identify their regular customers and their needs by analyzing their history and plan stocks accordingly. Once underway we will expand our scope to online shopping by integrating with respective retail online shopping system.

## **Project Charter and Scope Statement:**

**Project Name:** SMART SHOPPER

**Background and Justification:**

Currently, there are several shopping applications available online which infuses retailers suggestions to the customer rather than customer needs. In order to do grocery shopping users need to create a shopping list upfront and by this means, a user requires time to prepare the list.

The solution should focus on above mentioned problem. Thus suggesting “Smart Shopper” application to plan grocery shopping and track past purchase history and identify the needs rather than retailers suggestions.

**Project Objectives:**

* Implementing a system to help user to find current and future shopping needs
* Provide ability to purchase with multiple retailers online
* Provide scope for Business Intelligence to retailers

**Assumptions:**

* Project sponsor will ensure funding of the project
* Project scope will not be changed in the future
* Dedicated staff will remain in their current roles until project completion

**Deliverables:**

* Beta version of the app and website will be made available to consumers by the end of the second month
* Full functional stable version of app and website will go live at the end of the fourth month after incorporating feedback from beta testers
* Ability to buy product within the app will be made available at the end of the sixth month

**Project Scope:**

Upon completion, the new application will include the following details.

* Global login for users in all platforms like mobile, tablet, desktop and laptop
* Display product shopping history for each user on all platforms
* Suggest product to users for shopping grocery items based on purchase patterns

**Project Success Criteria:**

Success of full version of product after 6 months will be measured in following ways:

* Number of unique app installs and website hits should reach 100,000
* Average engagement time of the user with the product should be minimum of 30 minutes per month
* Achieve 99.99% product uptime during the span of 6 months.

**Project Sponsor and Stakeholders:**

* Project sponsor: Dr. Dawn Owens.
* Stakeholders:
  + Imran Ahamed
  + Ragupathy Krishnan Marimuthu
  + Surendar Rajavijayan Sundar
  + Vigneshwaran Kannan
  + Yuvanesh Vedaraju

## **Work Breakdown Structure:**

1. Project Initiation
   1. Form a project team.
   2. Elect team lead.
   3. Develop project charter.
   4. Deliverable: Submit project charter.
2. Planning
   1. Perform feasibility analysis.
   2. Create project scope document.
   3. Develop project plan.
   4. Create WBS.
   5. Deliverable: Submit project plan.
   6. Milestone: Project plan approval.
3. Execution
   1. Analysis:
      1. Gather functional requirements.
      2. Verify and validate functional requirements.
      3. Create context diagram.
      4. Create class diagrams.
      5. Create use case diagrams.
      6. Create sequence diagram for major use cases.
      7. Deliverable: UML diagrams.
      8. Milestone: Approval of use cases.
   2. Design:
      1. Create user interface design.
      2. Design database.
      3. Design data dictionary.
      4. Create software design.
      5. Design user controls.
      6. Create test cases.
      7. Deliverable: Test cases.
      8. Milestone: Project design completion.
   3. Implementation:
      1. Deployment in QA environment.
      2. Testing in QA environment.
      3. Deployment in live environment.
      4. User training documentation.
      5. Go Live.
      6. Deliverable: Final product.
4. Control
   1. Evaluate change request.
   2. Update project documents.
   3. Create performance reports.
   4. Deliverable: updated project documents.
5. Closing
   1. Final report and presentation.
   2. Gain formal acceptance.
   3. Document lesson learned.
   4. Achieve project document/files.
   5. Deliverable: Final report.
   6. Milestone: Project signoff.

**WBS Dictionary:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| WBS Id | WBS Name | Responsible Person | Complexity | Description |
| 2.1 | Perform feasibility analysis | Ragupathy Krishnan Marimuthu | Medium | This is an important phase as the development team visits the user and studies the system so as to investigate the need for development in the given system. By the end of the feasibility study, the team furnishes a document that holds the different specific recommendations for the candidate system. It also includes personnel assignments, costs, project schedule and target dates. The crucial purpose of this phase is to find the need and to define the problem that has to be solved. |
| 3.1.1 | Gather functional requirements | Surendar Rajavijayan Sundar | Medium/High | Functional requirements describe the core functionality of the application. This section includes the data and functional process requirements. Process requirements describe what the application must do. They relate the entities and attributes from the data requirements to the users’ needs. State the functional process requirements in a manner that enable the reader to see broad concepts decomposed from generalities into layers of increasing detail. |
| 3.3.4 | User training document | Yuvanesh Vedaraju | Medium | After deployment of the system, a training plan is documented which outlines the objectives, needs, strategy, and curriculum to be addressed when training users on the new information system. Training activities are developed to teach user personnel the use of the system as specified in the training criteria. |
| 4.3 | Create performance reports | Vigneshwaran Kannan | Medium | Once the changes have been implemented in the system based on customer feedback, there will be performance reports to evaluate how effective changes were. For example, based on the customer feedback if an additional feature needs to be added, the overall performance of the application is tested and has to determine how well the changes has worked out. |

## Meeting Minutes:

# **Call to order:**

A meeting of Smart Shopper was held at UT Dallas on 02/04/2016.

# **Attendees:**

Attendees include:

* Imran Ahamed
* Ragupathy Krishnan Marimuthu
* Surendar Rajavijayan Sundar
* Vigneshwaran Kannan
* Yuvanesh Vedaraju

# **Members not in attendance:**

Members not in attendance include: Dr. Dawn Owens.

# **Approval of minutes:**

* Ragupathy was nominated by Yuvanesh to lead the project and was unanimously elected.
* Ragupathy walked attendees through the project objectives and scope. Vigneshwaran suggested that project scope should include tablet devices as well and was agreed upon.
* Surendar agreed to create project timelines and estimates based on the modified scope and objectives to present before the stakeholders on the next meeting.
* Imran led the discussion on technical challenges expected during the implementation.

# **Reports:**

* Yuvanesh submitted the initial project scope and objectives document for discussion.

# **Action Items:**

* Ensure Dr. Dawn Owens is informed of the change in scope.
* Surendar to submit initial project timelines at the next meeting.
* Ragupathy will consult with Dr. Dawn Owens as what consists are project success criteria and present it to the team.

# **Next Meeting:**

* The next meeting will be held at UT Dallas on 02/11/2016.

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| Ragupathy Krishnan Marimuthu |  | 02/05/2016 |
| Team Lead |  | Date of approval |

**Call to order:**

A meeting of Smart Shopper was held at UT Dallas on 02/11/2016.

# **Attendees:**

Attendees include:

* Imran Ahamed
* Ragupathy Krishnan Marimuthu
* Surendar Rajavijayan Sundar
* Vigneshwaran Kannan
* Yuvanesh Vedaraju

# **Members not in attendance:**

Members not in attendance include: Dr. Dawn Owens.

# **Approval of minutes:**

* Yuvanesh submitted the revised scope document, the document was approved by all the team members and was agreed there will be no change in scope henceforth.
* Ragupathy presented and explained the project success criteria document, he drafted after consulting with Dr. Dawn Owens. After a brief discussion, it was agreed to reduce uptime criteria for success from 100% to 99.99%.
* Surendar presented his project timelines document, Imran emphasized the need to have additional buffer time to accommodate unforeseen risks, which was seconded by Vigneshwaran. Ragupathy instructed Surendar to allocate an additional week as buffer time.
* Vigneshwaran initiated a discussion list of deliverable for beta version, after a lengthy discussion the team agreed on the list of deliverables for beta version

# **Reports:**

* Yuvanesh submitted the revised project scope and objectives document for discussion.
* Ragupathy presented the project success criteria document.
* Surendar presented the initial project timeline document

# **Action Items:**

* Ensure Dr. Dawn Owens is informed of the change in project success criteria document.
* Ragupathy will discuss with Dr. Dawn Owens on when to start the implementation of the project.

# **Next Meeting:**

* Ragupathy will email the schedule of next meeting after discussing with Dr. Dawn Owens.

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| Ragupathy Krishnan Marimuthu |  | 02/12/2016 |
| Team Lead |  | Date of approval |