# TY. B. Tech.

**CS 3001: Software Engineering Laboratory**

## Assignment No: 1

**Online Tiffin Service**

**Project Statement of Work**

***26-04-2019***

***Version 1.0***

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Group Information** | | | |
| **Roll. No.** | **Gr. No.** | **Name** | **Roles** |
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| 14 | **161407** | **Priti Deo** | **Designer** |
| 05 | **161646** | **Sanket Kulkarni** | **Developer** |

**Approved By: Dr M. R. Dube**

Academic Year: 2018-19 Semester: II

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1. **TITLE**

**Online Tiffin Service** is a web based application. The main purpose of “Online Tiffin Service” is to

provide a convenient way for a customer to order a tiffin.

* 1. This project will develop a system that automates the processes and activities of a tiffin services. In this project, we will make an interface by which task of searching via type of cuisine, chefs, their specialities to order a tiffin will become easier.
  2. Manually visiting at the customers’ door to take an order often requires a lot of time and effort. A system such as this provides an interface by which customer can easily order according to his requirements and tiffin services can take the orders online. Users can give order from any place within a city and pay cash on delivery. The system deals with ordering, processing and delivering tiffin. Ordering is done by a valid customer with appropriate identity.

# BACKGROUND

With the advent of the high-tech industries and speeding technological advancements people are seeing themselves busier than ever. This hectic schedule of a day leaves them with only some couple of hours for personal investment. If then is the added job of cooking and corresponding chore then we lose our edge at efficient working. The option comes handy by providing commendable quality food at reasonable prices, at any time, also provides the customers with multi-cuisine options and all this just at their doorstep. The online interface is interactive and will help the users to choose their meals, offer interesting deals and save their precious time of travelling to the food as the food will travel to them from now.

* 1. The mandate of the organization is to save the efforts, time and energy that a person needs to put into taking orders manually and provide delivery location by google maps to delivery guy.
  2. The services and products are open to all who agree to offer the mentioned price for the food and services. These services will be on basis of the order placed, earlier orders and organization’s priority protocol.
  3. The organization aims to offer good quality food available in multiple cuisine with a home delivery option, all of which will be communicated through an online interface.
  4. The need for such a service has been underlined recently. People nowadays are ready to pay a fair price for their meals. And having multiple cuisine and home delivery options make it better. The organization promises to offer proper returns for the payment the customers make.
  5. The home delivered food from the restaurants is comparatively more expensive due to added taxes for services and is also cuisine restricted. The organization provides the taste at lower prices and with diversity in the menu.
  6. The organization need a third-party involvement for receiving honest and raw feedback from the consumer end in order-to revise and built upon the same for improved quality of products and services.

# OBJECTIVE

The objective of the organization is to interact directly with the consumers, know their demands for the food and services and respond to them within the promised timelines with quality food at their doorstep. The interaction would be done via online interface wherein the consumers must log in and place order for their meals. The order once received will take its minimum time for preparation and will then be sent out for delivery.

* 1. With this set up we hope to achieve a faster and more efficient way to supply meals but also ensures the quality and taste. The development of the chain increases job opportunities at a certain level and saves the customers’ valuable time.
  2. the system will be open to all to approach us with their food requirements. The organization will serve all the orders it receives if possible with equal importance and dedication given to each. The organization might also offer special extra services and discounts for its regular customers.
  3. The third-party contractors needed will be kept pure to receive the consumer-end feedback and nothing more.

# DEFINITIONS AND APPLICABLE DOCUMENTS

## Cuisine:

A style or method of cooking especially a characteristic of particular-country, region

or establishment.

## Tiffin:

Snack or a light meal packed in sealed bags which are easy to carry.

# BUSINESS AND/OR TECHNICAL ENVIRONMENT

The Business and Technical Environment of proposed system to succeed in a-given period is following:

* + 1. At the first stage, the team will work daily two hours. But as per further requirements, the team may increase their working time for completion of the system in a-given period.
    2. Hypertext Mark-up Language(HTML), a standardized system for tagging text files to achieve font, colour, graphic, and hyperlink effects on World Wide Web pages.
    3. Cascading style sheet (CSS) is a Web page derived from multiple sources with a defined order of precedence where the definitions of any style element Conflict.
    4. PHP is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language. The PHP script is embedded within a

web page along with its HTML. Before the page is sent to a user that has requested it, the Web server calls PHP to interpret and perform the operations called for in the PHP script.

* + 1. MySQL: It is an open-source relational database management system (RDBMS).

# DESCRIPTION AND SCOPE OF WORK

Tiffin Management System is the solution to the different tiffin services situated locally in many cities and that provides home delivered food to various part of city. Earlier all the processes were done manually. The manual process is done by maintaining the details of the customer, his name, address, order.

* + - 1. Gone are the days when one used to call food delivery centre to know today’s special menu. With the advent of Word Wide Web, it is observed widely that there is a rapid rise in the number of online food services which provides food at higher rate. But this tiffin service system delivers quality food at cheaper rate.
      2. With the evolution of the internet and increase in internet literacy rate, now the people have a choice to move from phone ordering to online ordering and they are ready to pay fair price for their meal which online tiffin service offers them, and all these key factors make sure that, in the coming years there will be great scope in online tiffin service.

# DELIVERABLES

These are some of the deliverables that team can outlie at this stage of development. Each stage has its own challenges and will be given apt importance by the contractor.

|  |  |
| --- | --- |
| **No.** | **Details** |
| 1 | Statement of work |
| 2 | Feature |
| 3 | SRS document |
| 4 | Feasibility Study and Project Plan using AGILE |
| 5 | Sprint level planning activity |
| 6 | Sprint Plan and Sprint Design |
| 7 | Software Configuration Management Plan (SCMP) |
| 8 | Sprint Execution |
| 9 | Sprint Review and Sign- offs |

# APPROACH AND METHODOLOGY

* + - 1. For completion of the work under the resulting contract, the work of system will be subdivided in the team members of the team. Designing of the system by using web language create a front end of the system.
      2. After data collection, data analysis as well as validation of that data will take place so

that it can be easily handle by organization’s administration.

* + - 1. Designing of integrate system and the back end of the system will be formed simultaneously with the data operations.
      2. Immediately after, the preview of the system will show to the organization and their feedback about the system will take in considerations.
      3. At the final stage, the delivery of proposed system will take place.

# T.Y. B. Tech.

**CS 3001: Software Engineering Laboratory**

## Assignment No: 2

**Online Tiffin Service**

**Project Feature Set Description**

|  |  |  |  |
| --- | --- | --- | --- |
| Project Group Information | | | |
| **Roll. No.** | **Gr. No.** | **Name** | **Roles** |
| 30 | 161406 | Manaswi Lukkad | Analyst |
| 14 | 161407 | Priti Deo | Designer |
| 5 | 161646 | Sanket Kulkarni | Developer |

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Academic Year: 2018-19 Semester: II

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**PROJECT VISION**

To provide a platform for users where he can get good quality home-made food at his door step at reasonable prices.

# PROJECT MISSION

The Mission Statement is a summary of what the project is trying to achieve. Project mission is as follows:

* The core mission of online tiffin services is to provide home cooked food by expert chefs at people’s door step at fare prices. The project mainly concentrates on fulfilling users need as and when required. The project will be presented in the form of website.
* The online tiffin service website will have tiffin as well as chefs options. Either he can go for daily menu, he can choose from various cuisines offered on that particular day or he may request for food item of his choice to be delivered.
* This project wishes to provide home cooked food for hostellers and working bachelors at fare prices. On being opposite side as consumers we have experienced day to day heck for home made food hence we have undertaken this project.

# PROJECT SCOPE

Tiffin service will take requests from user in terms of their required cuisine or daily menu tiffin and would display all other chefs and cuisine options. Main objective ia to help people find good quality home cooked food at fair prices.

These are our project goals as defined by team :

* Building chef profiles.
* Display daily tiffin menu.
* Putting all information about different cuisines we provide.
* Take online orders from customers.
* Delivery of tiffin in efficient time.
* Feedback about the order.

# GOALS

|  |  |  |
| --- | --- | --- |
| Goal-ID | Priority | Factors Addressed |
| 1 | 1 | Build chef Profile |
| Target Audience | Customers |
| Driver | To make chefs profile |
| Description | Populating the whole database with player detail |
| Response | The goal is to collect data by personally visiting chefs or  contact them using social media. |
| Open Issues | Discussion and Revision |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goal 1 Description: | | | | |
| Specific Test | | | | |
| Is ‘What’  identifiable? | Is the ‘Why’ clear? | Can ‘Who’ be  identified? | ‘Where’ will it be performed? | ‘Which’ resources  are needed? |
| Collecting data of chefs | To show this data on website | The feedback system will use this | Software engineer’s machines  Web | Web scaping and simple data entry |

|  |  |  |
| --- | --- | --- |
| Goal 1 Description: | | |
| Measurable Test | | |
| Is the end result quantifiable? | ‘Figure’ of Measurement | Has the goal a clear end date/point? |
| It will be a database of enough chef details to present them on website | It can be measured on the basis of how many numbers of chef’s details are stored in the database | This is the initial step of database, so good amount of chef’s details is the end point of this goal |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal 1 Description: | | | |
| ATTAINABLE Test | | | |
| What is your reaction to goal? | Does it feel realistic? | Is it overwhelming? | Do you find it motivating? |
| This goal is start of our website. Basically by this  only we can give cuisine option in our website. | Web Scaping and data Collection can be done in fair amount of time | To some extent | As this goal is start of our project so it is quite motivating |

|  |  |  |
| --- | --- | --- |
| Goal 1 Description: | | |
| RELEVANT Test | | |
| Does it fit into the overall team  / organization objective? | Taking overall fit is the timing appropriate? | Do you have sufficient resources / budget to succeed? |
| This forms the crucial part of the system and hence helps attain a problem that the  organization faces | By using the sprint execution method, we can achieve this goal. | The team has enough resources to contact chefs as we are going to search them through social media. |

|  |  |  |
| --- | --- | --- |
| Goal 1 Description: | | |
| TIME BOUND Test | | |
| Does it have a clear end date/point? | Is the focus clear so you can create an action plan? | Is its position on an Urgency/Importance grid clear? |
| This is the initial step of database, so we need at least 10 chefs to start tiffin services. Once we have started providing tiffin then also we can some more chefs to  website. | The focus of this goal is clear : to populate the database with good number of chefs, so that we can go for next step. | These chefs are going to be base data for all new chefs who are going to join after we have started our services. So these chefs(we are going to add initially)should have a great portfolio. |

|  |  |  |
| --- | --- | --- |
| Goal-ID | Priority | Factors Addressed |
| 2 | 2 | Display daily tiffin menu |
| Target Audience | Customers |
| Driver | To provide a way to handle user input |
| Description | Here daily tiffin menu will be displayed |
| Response | The goal is to provide daily menu |
| Open Issues | Discussion and Revision |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goal 2 Description: | | | | |
| Specific Test | | | | |
| Is ‘What’  identifiable? | Is the ‘Why’ clear? | Can ‘Who’ be  identified? | ‘Where’ will it be  performed? | ‘Which’ resources  are needed? |
| Displaying daily menu. | To provide home cooked food for bachelors and other user at their doorstep | The user who wants a tiffin or meal for the same day. | It will be  performed on client/user machines. | The user choices collected in the input stage, stored in database and some computer hardware to do  processing. |

|  |  |  |
| --- | --- | --- |
| Goal 2 Description: | | |
| Measurable Test | | |
| Is the end result quantifiable? | ‘Figure’ of Measurement | Has the goal a clear end date/point? |
| It will provide satisfactory result to the user. | It can be measured on the basis of  how many different dishes we show on website | This goal must be accomplished on time. |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal 2 Description: | | | |
| ATTAINABLE Test | | | |
| What is your reaction to goal? | Does it feel realistic? | Is it overwhelming? | Do you find it motivating? |
| This will be one of the main goals to be achieved in this system. | Once the earlier goal is achieved, it is very realistic. | Yes it is. | Yes, this is motivating for one who will be doing front end. |

|  |  |  |
| --- | --- | --- |
| Goal 2 Description: | | |
| RELEVANT Test | | |
| Does it fit into the overall team  / organization objective? | Taking overall fit is the timing appropriate? | Do you have sufficient resources / budget to succeed? |
| This forms the crucial part of the system creates functionality to handle input. | By using the sprint execution method, we can achieve this goal. | The goal is to show daily menu so team doesn’t need as such resources. What all is needed, is  coding. |

|  |  |  |
| --- | --- | --- |
| Goal 2 Description: | | |
| TIME BOUND Test | | |
| Does it have a clear end date/point? | Is the focus clear so you can create an action plan? | Is its position on an Urgency/Importance grid clear? |
| Yes it has a clear end date/point. | The focus of this goal is clear: to handle user input programmatically. So, steps  forward can be taken. | In the initial stages, it would be less important as input goals need to be cleared first, after that it would  have medium to high priority. |

|  |  |  |
| --- | --- | --- |
| Goal-ID | Priority | Factors Addressed |
| 3 | 2 | Putting all information about different cuisines we provide |
| Target Audience | Customers |
| Driver | To provide a way to handle user input |
| Description | Here different cuisines will be displayed |
| Response | The goal is to provide different cuisines under the same  roof |
| Open Issues | Discussion and Revision |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goal 3 Description: | | | | |
| Specific Test | | | | |
| Is ‘What’  identifiable? | Is the ‘Why’ clear? | Can ‘Who’ be  identified? | ‘Where’ will it be  performed? | ‘Which’ resources  are needed? |
| Suggesting available cuisines. | To provide hotel food at fare prices. | The user who wants a tiffin or meal for the same day | It will be  performed on client/user machines. | The user choices collected in the input stage, stored in database and some computer hardware to do  processing. |

|  |  |  |
| --- | --- | --- |
| Goal 3 Description: | | |
| Measurable Test | | |
| Is the end result quantifiable? | ‘Figure’ of Measurement | Has the goal a clear end date/point? |
| It will provide satisfactory result to the user. | It can be measured on the basis of how many different cuisines we  show on website | This goal must be accomplished on time. |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal 3 Description: | | | |
| ATTAINABLE Test | | | |
| What is your reaction to goal? | Does it feel realistic? | Is it overwhelming? | Do you find it motivating? |
| This will be one of the main goals to be  achieved in this system. | Once the earlier goal is achieved, it is very  realistic. | Yes it is. | Yes, this is motivating for one who will be  doing front end. |

|  |  |  |
| --- | --- | --- |
| Goal 3 Description: | | |
| RELEVANT Test | | |
| Does it fit into the overall team  / organization objective? | Taking overall fit is the timing appropriate? | Do you have sufficient resources / budget to succeed? |
| This forms the crucial part of the system creates functionality to handle input. | By using the sprint execution method, we can achieve this goal. | The goal is to show all cuisines so  team doesn’t need as such resources. What all is needed is coding. |

|  |  |  |
| --- | --- | --- |
| Goal 3 Description: | | |
| TIME BOUND Test | | |
| Does it have a clear end date/point? | Is the focus clear so you can create an action plan? | Is its position on an Urgency/Importance grid clear? |
| Yes it has a clear end date/point. | The focus of this goal is clear: to handle user input  programmatically. So, steps forward can be taken. | In the initial stages, it would be less important as input goals need to be  cleared first, after that it would have medium to high priority. |

|  |  |  |
| --- | --- | --- |
| Goal-ID | Priority | Factors Addressed |
| 4 | 3 | Take online orders from customers |
| Target Audience | Customers |
| Driver | To get information from user choices |
| Description | Here daily tiffin menu or cuisine options will be booked. |
| Response | The goal is to book online order for meal. |
| Open Issues | Discussion and Revision |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goal 4 Description: | | | | |
| Specific Test | | | | |
| Is ‘What’  identifiable? | Is the ‘Why’ clear? | Can ‘Who’ be  identified? | ‘Where’ will it be  performed? | ‘Which’ resources  are needed? |
| Online booking. | So that the users don’t have to go physically to order their meal. They can get home cooked or hotel cooked food at  their doorstep. | The user who wants a tiffin or meal for the same day. | It will be performed beforehand on development machines. | The user choices collected in the input stage, stored in database and some computer hardware to do processing. |

|  |  |  |
| --- | --- | --- |
| Goal 4 Description: | | |
| Measurable Test | | |
| Is the end result quantifiable? | ‘Figure’ of Measurement | Has the goal a clear end date/point? |
| Daily tiffin or any other dish will be booked. | As meal is chosen by user database will be populated by his  order. | Yes. |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal 4 Description: | | | |
| ATTAINABLE Test | | | |
| What is your reaction to goal? | Does it feel realistic? | Is it overwhelming? | Do you find it motivating? |
| This will be one of the main goals to be achieved in this system. | Statistics can be very useful in such scenarios  so it is not too far- fetched. | To some extent, but it is not too far-fetched. | It is motivating because it is a main part of a system. |

|  |  |  |
| --- | --- | --- |
| Goal 4 Description: | | |
| RELEVANT Test | | |
| Does it fit into the overall team / organization objective? | Taking overall fit is the timing appropriate? | Do you have sufficient resources / budget to succeed? |
| This forms the crucial part of the system and hence helps attain a problem that the  organization faces. | By using the sprint execution method, we can achieve this goal. | The resources we need should be served after the input stage. In terms of hardware requirements,  team has enough resources. |

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| --- | --- | --- |
| Goal 4 Description: | | |
| TIME BOUND Test | | |
| Does it have a clear end date/point? | Is the focus clear so you can create an action plan? | Is its position on an Urgency/Importance grid clear? |
| Yes it has a clear end date/point. | The focus of this goal is clear: to store user order. So, steps forward can be taken. | In the initial stages, it would be less important as input goals need to be cleared first, after that it would  have medium to high priority. |

|  |  |  |
| --- | --- | --- |
| Goal-ID | Priority | Factors Addressed |
| 5 | 4 | Delivery of tiffin in efficient time |
| Target Audience | Customers |
| Driver | To improve delivery system |
| Description | Users’ order will be delivered. |
| Response | The goal is to deliver users’ order or daily tiffin . |
| Open Issues | Discussion and Revision |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goal 5 Description: | | | | |
| Specific Test | | | | |
| Is ‘What’  identifiable? | Is the ‘Why’ clear? | Can ‘Who’ be  identified? | ‘Where’ will it be  performed? | ‘Which’ resources  are needed? |
| Delivery of tiffin. | So that the users can get home cooked or hotel cooked food at their doorstep. | The user who wants a tiffin or meal for the same day. | Tiffin will be  delivered by delivery squad. | Transportation services(bus, bike), initially we provide tiffin in near areas and then increase the area of  delivery gradually. |

|  |  |  |
| --- | --- | --- |
| Goal 5 Description: | | |
| Measurable Test | | |
| Is the end result quantifiable? | ‘Figure’ of Measurement | Has the goal a clear end date/point? |
| Tiffin/order delivered is confirmed by user. | Meal is delivered. | Yes. |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal 5 Description: | | | |
| ATTAINABLE Test | | | |
| What is your reaction to goal? | Does it feel realistic? | Is it overwhelming? | Do you find it motivating? |
| This is the main part of system deliver food in efficient time. | Yes it is completely realistic, as we have to study maps and routes,  etc. | Yes. | As algorithms are involved, it is motivating. |

|  |  |  |
| --- | --- | --- |
| Goal 5 Description: | | |
| RELEVANT Test | | |
| Does it fit into the overall team / organization objective? | Taking overall fit is the timing appropriate? | Do you have sufficient resources / budget to succeed? |
| This forms the crucial part of the system and hence helps attain a problem that the  organization faces. | By using the sprint execution method, we can achieve this goal. | The team needs transportation to deliver food at customers’ doorstep. The team has enough  resources as of now. |

|  |  |  |
| --- | --- | --- |
| Goal 5 Description: | | |
| TIME BOUND Test | | |
| Does it have a clear end date/point? | Is the focus clear so you can create an action plan? | Is its position on an Urgency/Importance grid clear? |
| Yes, it must have a clear end as user wants his tiffin to be delivered by tiffin service. | The focus of this goal is clear: to deliver users’ order. | It is most important as system/tiffin service is supposed to deliver tiffin/order in less time possible. |

|  |  |  |
| --- | --- | --- |
| Goal-ID | Priority | Factors Addressed |
| 6 | 5 | Feedback about the order |
| Target Audience | Customers |
| Driver | To improve food quality |
| Description | Users’ will give feedback about meal they ordered or about  the chef. |
| Response | The goal is to rate chef according to users’ responses. |
| Open Issues | Discussion and Revision |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goal 6 Description: | | | | |
| Specific Test | | | | |
| Is ‘What’  identifiable? | Is the ‘Why’ clear? | Can ‘Who’ be  identified? | ‘Where’ will it be  performed? | ‘Which’ resources  are needed? |
| Feedback. | So that food quality will be maintained and improved  accordingly. | The user who wants a tiffin or meal for the same day. | Data of feedback will be fetched and then it will be analyzed by  analysts. | Database to store  users’ rersponses. |

|  |  |  |
| --- | --- | --- |
| Goal 6 Description: | | |
| Measurable Test | | |
| Is the end result quantifiable? | ‘Figure’ of Measurement | Has the goal a clear end date/point? |
| Feedback will be stored in database table so end result is quantifiable. | Rating given by customer. | Yes. |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal 6 Description: | | | |
| ATTAINABLE Test | | | |
| What is your reaction to goal? | Does it feel realistic? | Is it overwhelming? | Do you find it motivating? |
| This is quite important as by doing this food quality is maintain and we get to know whether customer is satisfied or  not. | Yes it is completely realistic, as we have to build mechanism for rating and grading of chefs after fetching data. | Yes. | As algorithms are involved, it is motivating. |

|  |  |  |
| --- | --- | --- |
| Goal 6 Description: | | |
| RELEVANT Test | | |
| Does it fit into the overall team  / organization objective? | Taking overall fit is the timing appropriate? | Do you have sufficient resources / budget to succeed? |
| This forms the crucial part of the system and hence helps attain a problem that the  organization faces. | By using the sprint execution method, we can achieve this goal. | Here what all is needed, is back end coding and databases to store data given by users’. So as this is  start team has enough resources. |

|  |  |  |
| --- | --- | --- |
| Goal 5 Description: | | |
| TIME BOUND Test | | |
| Does it have a clear end date/point? | Is the focus clear so you can create an action plan? | Is its position on an Urgency/Importance grid clear? |
| Yes, as data is going to be analyzed periodically. | The focus of this goal is clear: to take feedback from customers. | It is most important as system/tiffin service is supposed maintain their food quality for customers’  satisfaction. |

**FEATURE SET**

These are the features that make our product unique :

|  |  |
| --- | --- |
| Feature-ID | Feature Description |
| 1 | The first is, bachelors(customers) will have home cooked food at his doorstep. |
| 2 | Customer can choose between daily menu and cuisine option so that he can order  homemade food and restaurant food from same website. |
| 3 | Customer can ask for specific changes according to his taste in his ordered cuisine. |
| 4 | Home delivery is free. |

# STAKEHOLDERS

|  |  |  |  |
| --- | --- | --- | --- |
| Stakeholder | Concerns | Quadrant | Strategy/ Benefits |
| Internal | Ensuring proper handover of project to operations team | Minimal Effort | Communicate project specifications as required |
| Internal | Resource and scheduling constraints for production once project is transitioned to operations | Key Player | Solicit stakeholder as member of steering committee and obtain feedback on project planning. Frequent communication and  addressing concerns are imperative |
| External | Ensuring on time delivery of materials | Minimal Effort | Communicate project schedule and material requirements ahead of  time to ensure delivery |
| Internal | Possible union strike may impact material delivery | Minimal Effort | Solicit frequent updates and develop plan for alternative supply  source |
| External | Product performance must meet or exceed current product | Key Player | Communicate test results and performance specifications and obtain feedback on customer requirements or any changes. Provide frequent status reports and  updates. |
| Internal | Concerns regarding resources to assist project team with product design | Keep Satisfied | Communicate applicable resource requirements early and ensure resources are released back to engineering when they’re no longer  required |
| External | Questions regarding design of product | Keep Informed | Allow technical staff to work with stakeholder to answer questions and address concerns and provide  test results for validation |

**ACCEPTANCE CRITERIA**

* To understand what customer wants in their tiffin and how to organize according to their cuisine choices. Reviews will be taken regularly from old customers for quality maintenance.
* The Project Manager has set these tasks for achieving successful delivery of the project:

1. As discussed earlier the objectives of the project have been discussed with the customer and these will be satisfied when delivering the project.
2. The team’s project manager will review the project before its handing over

also an external group will be assigned to check that the team has stayed true to its promises.

1. Any changes that the customer wishes after the product completion will

be addressed in 1-2 weeks of the initial written application by the customer. d. The following is a deliverables acceptance document.

|  |  |  |
| --- | --- | --- |
| Item | Concerns | Accepted / Rejected |
| Vision Definition | **Complexity** | **Accepted** |
| Mission Definition | **Relation with Deliverables** | **Accepted** |
| Goals | **Description and structure** | **Accepted** |
| Feature Definitions | **Readability for non-technical stakeholders** | **Accepted** |
| Deliverables definition | **Consistency** | **Accepted** |

**T.Y. B. Tech.**

**CS 3001: Software Engineering Laboratory**

Assignment No: 3

**Online Tiffin Service**

**System Requirement Specification**

***01-04-2019***

***Version 1.0***

|  |  |  |  |
| --- | --- | --- | --- |
| Project Group Information | | | |
| Roll. No. | **Gr. No.** | **Name** | **Roles** |
| 30 | **161406** | **Manaswi Lukkad** | **Analyst** |
| 14 | **161407** | **Priti Deo** | **Designer** |
| 5 | **161646** | **Sanket Kulkarni** | **Developer** |

**Approved By: Dr M. R. Dube**

**Academic Year: 2018-19 Semester: II**

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# INTRODUCTION

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete **Online Tiffin Service** software system by defining the problem statement in detail.

|  |  |
| --- | --- |
| Item | Description |
| Purpose | **To jot down the System requirement specification of the online tiffin service. The purpose of the SRS is to provide a complete technical background on the functionality of our system.** |
| Audiences | **Developers(Admins), clients and other concerned audience.** |
| SRS Scope |  |
| Project Scope | **Primarily the aim of our project is to provide a common link between the tiffin service and the people all over Pune, for speedy and efficient delivery of the tiffin at the customer’s doorstep.** |

# TERMS OF REFERENCE

**2.1.Background:**

1. The tiffin providing network is a huge network covering majority part of Pune. The tiffin service is mostly used by working bachelors and students.
2. As the tiffin service is not digitalised it is not publicized well among the people and they are not able to take the benefit of that service.
3. Online platform is required to publicize the tiffin service as well as to provide a link between the tiffin providers and the customers.
4. The Online Tiffin Service connects the tiffin providers to each and every customer across Pune, to provide a healthy meal to the customers.
5. The Online Tiffin Service mostly helps the students studying in Pune, as they can get home-made healthy meal at their doorstep.

**2.2.Objectives**

1. The main objective of the project is to connect all the people over Pune to the tiffin service provider.
2. Stage-Wise objectives:

* To create a menu which is simple and loved by majority of the customers.
* To provide a special provision to the customer to design their own tiffin for delivery.
* To fix a reasonable and affordable amount to every item in the menu card.
* To provide the tiffin to every customer at their doorstep.

1. Target Audience

* Working Bachelors.
* Students across Pune.

**2.3.Issues**

1. Efficiency-Efficiency of the UI so that the user is not confused while using the project.
2. Relevance-Providing relevance of the project to stake holders.
3. Effectiveness-Exact output of the project and benefits of the project.
4. Impact-the population is growing and the product’s use will never cease to exist.
5. Sustainability-Once the project is launched it will target majority of the working and student crowd across Pune and will be able to self sustain.

**2.4.Methodology**

1. Collecting data about the cost of various food items across Pune.
2. Stakeholder involvement at initial and final stages will ensure smooth implementation
3. The planning and designing phase of the project will take about 1 month time.
4. The information collection will be done mainly through the apps like Zomato and by visiting the restaurants.
5. Data analysis of the cost prize should be done to set an affordable cost for the food item.

**2.5.Expertise**

The expertise needed for doing a project defines a set of professional requirements for the individuals and teams involved in project implementation. It will be the basis for team building, including training and skill assessment.

The Expertise section of a Project Terms of Reference template should identify the following:

* The type of work involved in the project is Data Analysis and Website development along with UI development
* The Type of skills required for this project are Website designing, Website and UI development , DBMS etc.
* 3 students from TY-E will be involved in this project.
* The period of engagement of each member is about the same roughly 3 months.
* A description of the duties and responsibility per teammate has been provided in earlier documents and will be further described in the succeeding documentation.
* The relationship between the team members, including leadership roles are specified in the following table:

|  |  |
| --- | --- |
| Name | Roles |
| Manaswi Lukkad | **Analyst** |
| Priti Deo | **Designer** |
| Sanket Kulkarni | **Developer** |

**2.6.Reporting**

Reports provide valued information about project performance over a certain period. Reporting is a process that starts once a project is launched and continues until the project is completed and its product is handed over. Reporting requirements will define how to write and submit project reports and what information to include. The Reporting Requirements section of a Terms of Reference template should clearly specify the requirements for the reporting process, and might include the details of:

* Table of contents for project reports/ Rules for composing annexes
* Report templates/ The language to be used in reports
* Computer software programmes to be used/ Submission dates
* People responsible for reporting and approving

**2.7.WorkPlan**

A work plan is a kind of strategy that aims to help solve problems throughout a project and boost employee drive and focus. It determines what actions need to be taken to start, implement, and complete the project within a specified time period and under defined budget. It is often used as a general guide for developing a project implementation plan. The Work Plan section of a Project Terms of Reference template should set out the activities and necessary resources required for achieving the project’s results and purpose. It should therefore include a summary of the anticipated work and time schedule, which are based upon the following:

* An analysis of the issues, in terms of the evaluation criteria
* The proposed implementation methodology/ The reporting requirements
* It will be further covered in the Project Plan document.

# PROBLEM DESCRIPTION

|  |  |
| --- | --- |
| The problem of | Providing good quality home made food at reasonable price |
| Affects | Chefs, students, working bachelors |
| The impact of which is | * The current scenario is that the tiffin providers are not properly connected to the end customers. * Due to lack of connectivity not everyone gets the best delivery or good quality food. |
| A successful solution would | * A successful solution will provide a better connectivity and ensure better delivery of the food. |

|  |  |
| --- | --- |
| For | Students, working bachelors |
| Who | Need good quality home made food at their doorstep. |
| The Online tiffin service | Is a delivery service tool |
| That | Gives options on various cuisines for home delivery. |
| Unlike | Other food delivery apps |
| Our product | Will directly connect the customers to the chef. |

# FUNCTIONAL HIERARCHY

|  |  |  |  |
| --- | --- | --- | --- |
| Goal-ID | 1 | Create User Profile | Description |
| Objective ID | 1 | Collect chef information | |
| Process ID: 1 | Load chef Registration form |
| Process ID: 2 | Acquire chef registration information |
| Objective ID | 2 | Analyse the information provided |  |
| Process ID: 1 | Examine member registration profile |
| Process ID: 2 | Launch chef profile |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal-ID | 2 | Create Menu Items | Description |
| Objective ID | 1 | Display daily tiffin menus | |
| Process ID: 1 | Change the menu |
| Process ID: 2 | Display menu |
| Objective ID | 2 | Taking online orders from the customers |  |
| Process ID: 1 | Give the order |
| Process ID: 2 | Add item in cart |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal-ID | 3 | Set Location Status | Description |
| Objective ID | 1 | To set the location | |
| Process ID: 1 | Provide google maps |
| Process ID: 2 | Gather the location |
| Objective ID | 2 | To build chef profile from feedback form | |
| Process ID: 1 | Make the classes |
| Process ID: 2 | Build the categories |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal-ID | 4 | Create Communication Forum | Description |
| Objective ID | 1 | Accept Customer Messages | |
| Process ID: 1 | Acquire available information |
| Process ID: 2 | Categorize customers |
| Objective ID | 2 | Analyse customer’s data. | |
| Process ID: 1 | Get the customer data |
| Process ID: 2 | Transfer request to customer |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal-ID | 5 | Simplify client’s Tasks | Description |
| Objective ID | 1 | Perform Search | |
| Process ID: 1 | Take the input |
| Process ID: 2 | Perform the search |
| Objective ID | 2 | Classify room | |
| Process ID: 1 | Notify concerned customer |
| Process ID: 2 | Record response against customer |

|  |  |  |  |
| --- | --- | --- | --- |
| Goal-ID | 6 | Provide Result | Description |
| Objective ID | 1 | Understand the order requested | |
| Process ID: 1 | Check for availability of chef |
| Process ID: 2 | Record result against customer |
| Objective ID | 2 | Payment Management | |
| Process ID: 1 | Generate customer payment |
| Process ID: 2 | Provide gateway to pay |

# 5.USER INTERFACES

5.1 Abbreviated UI, it is the junction between a user and a computer program. An interface is a set of commands or menus through which a user communicates with a program. A command-driven interface is one in which you enter commands. A menu-driven interface is one in which you select command choices from various menus displayed on the screen.

The user interface is one of the most important parts of any program because it determines how easily you can make the program do what you want. A powerful program with a poorly designed user interface has little value. Graphical user interfaces (GUIs) that use windows, icons, and pop-up menus have become standard on personal computers.

GUI is a program interface that takes advantage of the computer's graphics capabilities to make the program easier to use. Well-designed graphical user interfaces can free the user from learning complex command languages. On the other hand, many users find that they work more effectively with a command-driven interface, especially if they already know the command language.

Graphical user interfaces, such as Microsoft Windows and the one used by the Apple Macintosh, feature the following basic components:

* Pointer: A symbol that appears on the display screen and that you move to select objects and commands. Usually, the pointer appears as a small angled arrow. Text -processing applications, however, use an I-beam pointer that is shaped like a capital I.
* Pointing device: A device, such as a mouse or trackball, that enables you to select objects on the display screen.
* Icons: Small pictures that represent commands, files, or windows. By moving the pointer to the icon and pressing a mouse button, you can execute a command or convert the icon into a window. You can also move the icons around the display screen as if they were real objects on your desk. The website images with links to provide navigation through the page
* Windows: The project will open in a web browser window like google chrome, Microsoft edge etc.
* Menus: Most graphical user interfaces let you execute commands by selecting a choice from a menu. Menu options will be provided in the navigation bar.

In addition to their visual components, graphical user interfaces also make it easier to move data from one application to another. A true GUI includes standard formats for representing text and graphics. Because the formats are well-defined, different programs that run under a common GUI can share data. This makes it possible, for example, to copy a graph created by a spreadsheet program into a document created by a word processor.

5.2 Characteristics of Successful User Interfaces

* **Clear**: The project clarity while using the website. The menus and the hyper links will be given appropriate names to provide an easy reference to the user. The images with hyperlinks will be self-explanatory as to where they are redirected after clicking on them.
* **Concise**: The web UI will be small, simple and easy to use for the user. Not many complicated functionalities are added to the UI as not to confuse the user with a complicated UI. Most of the UI elements are self-explanatory requiring less description regarding their functionality.
* **Familiar**: The website is a whole new project which may not be implemented before. So User may find it difficult to navigate through the website as they will not be familiar with the UI.
* **Responsive**: The website is fast to load as image optimization is done to reduce image sizes. This makes the UI fast in operations. Feedback form is provided in the footer to receive feedback from customers regarding the delivery and taste of the tiffin.
* **Consistent**: UI developed is consistent with the functions assigned to it. Changes will not be made to UI unless there is any major requirement for the change/update to the website.
* **Attractive**: The UI is made attractive using simple and elegant images with interactive pages developed using javascript and jquery to provide a better user experience. The UI is eye catching due to the images and interactive features included in the webpage.
* **Efficient**: The UI is efficiently designed keeping the customer in mind while designing it. The UI provide an easy and efficient access to all the webpages and the features designed for the customers without confusing the customer.
* **Forgiving**: There is a wishlist option provided for the user to save his favourite for future use. Even if the customer closes the browser after adding items to cart without placing the order he can retrieve his cart items after logging in again.

|  |  |  |  |
| --- | --- | --- | --- |
| UI-ID | UI Name | Type | Scope |
| 1 | **Collect chef info** | **Input** | **Chefs are added to the database** |
| 2 | **Collect customer n info** | **Input** | **Customer will sign up providing necessary information** |
| 3 | **Extract chef information** | **Input** | **Customers can access all the information regarding the chefs before ordering their food.** |
| 4 | **Home page** | **Menu** | **Displays the initial UI connecting all pages on website** |
| 5 | **Menu page** | **navigation** | **The core page of the website providing the menu to the customer for ordering their tiffin.** |
| 6 | **Navigation bar** | **Navigation** | **Provides all the links to the pages across the website.** |
| 7 | **Feedback** | **NL** | **Provides a feedback form to the customers to submit a feedback regarding the taste and delivery of the tiffin.** |
| 8 | **cart** | **Command** | **Calculate the grand total of the customer and providing payment options and a confirmation mail after payment.** |
| 9 | **Main Page** | **Input** | **Select cook and mess** |
| 10 | **Food Images** | **Input** | **For ease of customer** |
| 11 | **Post Amenities** | **Input** | **Provide information to customer about food** |
| 12 | **Search Option** | **Input** | **Provide search option to customer** |
| 13 | **Search result** | **Command** | **Display all the related options from the dataset** |
| 14 | **Customer Home Page** | **Navigation** | **Display the menu that customer has shortlisted** |
| 15 | **Contact Detail** | **Navigation** | **Display the contact detail of customer** |
| 16 | **Status** | **Navigation** | **Change the status of the tracking order** |
| 17 | **Q&A** | **Input** | **Food provider uploads answers for FAQs** |
| 18 | **Ratings** | **Input** | **Customer rate the food** |
| 19 | **Calculate Profile** | **Command** | **System aquires statistics of all customers** |
| 20 | **Add previous customer records** | **Input** | **Customer added to the database** |
| 21 | **Deliver purchase statistics** | **Command** | **System acquires statistics of customer purchase** |
| 22 | **Generate Recipient** | **Forms** | **System acquires statistics of selected user** |
| 23 | **Logout** | **NL** | **Logout food provider session** |
| 24 | **Logout** | **NL** | **Ends customer session** |

# HARDWARE INTERFACES

|  |  |
| --- | --- |
| Profile | Description |
| Processor | Intel 5th generation |
| RAM | **4 GB** Ram |
| Server Side Technology | * Database storage capacity min:1GB * Monitor of resolution 1024x768 |
| Client Side Technology | * Monitor of resolution 1024x768 * Web browser supporting the technology used in the project |
| External Devices | * Monitor * Mouse * Keyboard |

# SOFTWARE INTERFACES

|  |  |
| --- | --- |
| Profile | Description |
| Front-end Capabilities | **JavaScript, Jquery, HTML 5, Bootstrap** |
| Back-end Capabilities | **PHP** |
| Programming Languages | **PHP, Mysql** |
| Operating Environment | **Any** |
| Software Platform | **Browser** |
| Database Servers | **Mysql** |
| Framework Resources | **NA** |
| API (If Any) | **Google map api** |
| Other Services/Resources | **NA** |
| Communication Interfaces | **Email** |

# LOGICAL DATABASES

|  |  |  |
| --- | --- | --- |
| Database Name | Parameter | Scope |
| Chefs | **Basic details of the chef** | **Input data** |
| Customer | **Basic details of the customer** | **Input data on sign in** |
| orders | **The orders placed** | **Input data** |
| Menu | **The Menu to be provided on a particular day** | **Updatable record** |
| Login for customers | **The login credentials** | **Updatable record** |

# NON-FUNCTIONAL REQUIREMENTS

* **Reliability**: The project provides complete anonymity of the user so their personal details are not leaked outside. The data to be stored using Mysql database so will be preserved for along time without leak of the data. The admin side of the website is handled by professional web developers to ensure proper maintenance of the project.
* **Availability**: The project may crash due to some problem with the web browser. The website will be available to the customers for ordering the food till 2200 hrs. The customers can check next days menu after 2200hrs i.e. after last order. Customers can place order from 1200 hrs. Even if the project crashes the customers cart will be saved and he will get his order after logging in again.
* **Security:** The Mysql database is protected from cross site scripting or sql injection. The hacker cannot access the database very easily.Even if the website fails due to some reason the database will be backed up after regular intervals to provide safety for data.
* **Maintainability:** Mysql database is used to store the database. Mysql is light weight database and easy programming is possible using mysql and php which ensures easy maintenance of the website
* **Portability:** As the project is a website it can be opened using any wen browser on any operating system meeting the minimum hardware requirement for the website.
* **Correctness:** The Tiffin service provides apt service according to the needs of the customer. A easy and interactive UI enables the easy navigation through the website.
* **Efficiency:** The tiffin service utilises the bootstrap framework and w3 css which simplifies the designing of the webpage and the remaining backend coding s done using php.
* **Flexibility:** The code can be easily updated in cases of failure, updating work or fixing bugs.
* **Testability:** Many can be test cases can be run to check the safety of the database and customer information.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Characteristic** | **H/M/L** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| 1 | Correctness |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Efficiency |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Flexibility |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Integrity/Security |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Interoperability |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Maintainability |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Portability |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Reliability |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Reusability |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Testability |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Usability |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Availability |  |  |  |  |  |  |  |  |  |  |  |  |  |

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Assignment No: 4

**Online Tiffin Service**

**Feasibility Study Report**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Group Information** | | | |
| **Roll. No.** | **Gr. No.** | **Name** | **Roles** |
| 30 | **161406** | **Manaswi Lukkad** | **Analyst** |
| 14 | **161407** | **Priti Deo** | **Designer** |
| 5 | **161646** | **Sanket Kulkarni** | **Developer** |

**Approved By: Dr M. R. Dube**

**Academic Year: 2018-19 Semester: II**

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| 4 | Feasibility Study Results | **2** |
| 5 | References | **2** |

1. **INTRODUCTION**

|  |  |
| --- | --- |
| Item | Description |
| Scope of Study | 1. Give the Customer options for various cuisines to order from. 2. Collect the order and choose the appropriate chef for the customer, 3. Take Feedback from the Customer and build chef profiles. |
| Audiences | 1. Customers (Working bachelors and Students) 2. Chefs |
| Project Type | Medium Scale |
| Platform Details | Existing Domains  1. Mother’s Masala  Existing Technology Usage Front End –   1. HTML 2. CSS 3. PHP   Back End –   1. MySQL 2. MongoDB 3. Python |

1. **DESCRIPTION OF SERVICES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Service -ID** | **Service Name** | **Audience** | **Scope** |
| S-1 | Provide Cuisines | Customer | Give various options for cuisines to the Customer. |
| S-2 | Collect Customer  Order | Customer | After the Customer decides his choices,We shall collect  the order items for further processing. |
| S-3 | Assign Chefs | Customer | A Chef will be chosen according to Order Details. |
| S-4 | Efficient Delivery | Customer | Efficient means and routes for Delivery. |
| S-5 | Take Feedback | Stakeholder | Feedback from Customers will be used for improvements  in Service |
| S-6 | Rate Chefs | Stakeholder | Chefs will be rated to build up their profiles. |

1. **TECHNOLOGY CONSIDERATIONS**

|  |  |  |
| --- | --- | --- |
| **Current Technology** | | |
| **Type** | **Parameter** | **Description** |
| Hardware | CPU | Intel Xeon E2630 v4 – 10 core processor, 2.2 GHz with Turbo  boost up to 3.1 GHz |
| Software | RAM  IDE | 8 GB  Visual Studio 17, Jupyter, PHPmyadmin |
|  | Local Server | XAMPP (PHP) |
|  | Browser | Mozilla or Chrome |

|  |  |  |
| --- | --- | --- |
| **Deployment Technology** | | |
| **Type** | **Parameter** | **Description** |
| Hardware | Browser | Mozilla or Chrome |
| Software | Support | HTML5, CSS, BOOTSTRAP, JavaScript, jQuery |
| Device | Desktop, Laptop, Tablet, Mobile |
|  | Screen | Screen with minimum 1024×576 resolution |

1. **FEASIBILITY STUDY RESULTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Option** | **Outcome** | **Ranking** | **Discussion** |
| Provide  Cuisines | Expected | H | All cuisines will be available for Customer to choose  from. |
|  | Unexpected | L | Some cuisines may not be available for the day. |
| Efficient  Delivery | Expected | H | The Customer Shall get his order after a maximum of 30  mins from Order. |
|  | Unexpected | L | The Delivery might be late due to foreign  circumstances(Traffic,etc.) |
| Process  Feedback | Expected | M | Feedback is positive. The value generated are precise  and consistent. |
|  | Unexpected | M | Feedback is negative. In such case model is re-trained  with correct parameters that generate positive feedback. |
| Chef  Profiles | Expected | H | All chefs to be rated highly. |
|  | Unexpected | M | Chefs underperforming. |

1. **REFERENCES**
   1. Statement of Work
   2. Feature Set
   3. System Requirement Specifications
   4. https://zakasfood.in/
   5. https:/[/www.mothersmasala.com/](http://www.mothersmasala.com/)

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Assignment No: 5

**Online Tiffin Service**

**Project Plan Outline**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Group Information** | | | |
| **Roll. No.** | **Gr. No.** | **Name** | **Roles** |
| 30 | **161406** | **Manaswi Lukkad** | **Analyst** |
| 14 | **161407** | **Priti Deo** | **Designer** |
| 05 | **161646** | **Sanket Kulkarni** | **Developer** |

**Approved By: Dr M. R. Dube**

**Academic Year: 2018-19 Semester: II**

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| 5 | Activity Register | **3** |
| 6 | Task Prioritization | **4** |
| 7 | Risk Register | **5** |

1. **INTRODUCTION**

|  |  |
| --- | --- |
| Deliverables | Benefits |
| 1.SOW | Gives an idea of what the system is. |
| 2. Feature Set | Provides the set of features the system will provide. |
| 3. SRS | Specifies the requirements for the system. |
| 4. Feasibility Study | Gives an account of how feasible it is to use the system. |
| 5. Project Plan | Will provide information on how the project will be  executed. |
| 6. Sprint Level Planning Activity | Planning will help in easy execution of the system. |
| 7. Sprint Level Design Activity | Preparing the design will make the implementation faster  because a blueprint will be available. |
| 8. Software Configuration Management  Plan | It will make the execution of the software much easier as  there is a plan in place. |
| 9. Sprint Execution | The system will be available to use as early as possible. |
| 10. Sprint Review | Fast review of the system so that so that errors can be  removed as early as possible. |

1. **PROJECT MILESTONES**

|  |  |  |
| --- | --- | --- |
| **Milestones** | **Phase** | **Description** |
| 1 | Inception | Delivering Statement of Work document |
| 2 | Inception | Delivering Feature Set document |
| 3 | Elaboration | Feasibility study and Project Plan using AGILE |
| 4 | Elaboration | Sprint level planning activity |
| 5 | Construction | Sprint Plan and Sprint Design |
| 6 | Construction | Software Configuration Management Plan (SCMP) and Sprint Execution |
| 7 | Transition | Sprint Review and Sign- offs |
| 8 | Transition | Feedback |

1. **WORK BREAKDOWN STRUCTURE**

|  |  |  |  |
| --- | --- | --- | --- |
| **WBS**  **Package** | **Role** | **Description** | **Delivery Date** |
| 1 | Documentation | Creation of SOW, FRS, SRS | 12 Feb 2019 |
| 2 | Designing | Making Prototypes | 10 March 2019 |
| 3 | Development | Development of Real System using appropriate languages | 14 April 2019 |
| 4 | Testing | Testing of System for Defects and checking for correctness | 30 April 2019 |
| 5 | Product Release | Marketing, Managing of the System in live environment | 2 May 2019 |
| 6 | Feedback | Taking user experience as feedback and modifying System | 12 May 2019 |
|  |  |  |  |

1. **PROJECT COMMUNICATION**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Communication Type | Description | Frequency | Format | Participants/ Distribution | Deliverable | Owner |
| Weekly Status Report | Email summary of project status | Weekly | Email | Project Guide, Project Team | Status Report | Project Manager |
| Weekly Project Team Meeting | Meeting to review action register and  status | Weekly | In Person | Project Team | Updated Action Register | Project Manager |
| Project Monthly Review (PMR) | Present metrics and status to team  and sponsor | Monthly | In Person | Project Sponsor, Team, and Stakeholders | Status and Metric Presentation | Project Manager |
| Project Gate Reviews | Present closeout of project phases and kickoff  next phase | As Needed | In Person | Project Sponsor, Team and Stakeholders | Phase completion report and phase kickoff | Project Manager |
| Technical Design Review | Review of any technical designs or work associated with the  project | As Needed | In Person | Project Team | Technical Design Package | Project Manager |

1. **ACTIVITY REGISTER**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity Number** | **Activity Name** | **Activity description** | **Responsibility** | **Comments** |
| *1* | *Prepare Documentation* | o *Create Project Initiation Documentation* | o *Manaswi Lukkad is responsible for coordinating with the team.* | o *Meet Deadlines* |
| o *Documents: SOW, Feature Set and SRS* | o *WBS Package 1* |
| *2* | *Conceptualize Design* | o *Evaluate Feasibility* | o *Manaswi Lukkad is responsible for execution of project planning phase.* | o *Quick Execution Required* |
| o *Develop Project Plan* | o *WBS Package 2* |
| *3* | *Collect Cuisine Details* | o *Acquire Data From Sources on the Internet* | o *Sanket Kulkarni is responsible for acquiring*  *correct data* | o *Important phase for smooth*  *development* |
| *4* | *Developing System* | o *A working System of taking orders and providing different cuisines* | o *Priti Deo is responsi ble for delegati ng everyon e with instructi ons for development* | * *Devel opme nt in Sprint s* * *WBS*   *Pack age 3* |
| *5* | *Design UI* | o *Create and Design UI to receive and deliver Orders* | o *Priti Deo will oversee the UI activity* | o *The phase execu tion will have to run parall elly with devel opme nt*  *stage* |
| *6* | *Checking For Bugs* | o *System Testing and Debugging* | o *Sanket Kulkarni and Manaswi Lukkad will work*  *together* | * *Prepa ring Test Cases* * *WBS*   *Pack age 4* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | *for this activity* |  |
| *7* | *Releasing Product* | * *Advertising Systems* * *Finding Clients* | o *Sanket Kulkarni will lead in this activity* | * *Good Mark eting Strat egies* * *WBS*   *Pack*  *age 4* |
| *8* | *Feedback of System* | * *Taking reviews from customers* * *Implementing new features* | o *Priti Deo, Manaswi Lukkad and Sanket Kulkarniwill work to improve on the*  *system.* | * *Unde rstan ding what chan ges are neede d* * *WBS*   *Pack age 6* |

1. **TASKS PRIORITAZATION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Task is of high*** |  | ***High Importance*** | ***Low Importance*** | ***Task is of low*** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***importance, with high urgency factor.***  *Must be done today & to high standard.*  *Action ASAP* | ***High Urgency*** | 1. **Get Orders from The Customers** 2. **Initiate Documentation** 3. **Choosing Chefs To Prepare the meal.** 4. **Provide Efficient Delivery Methods** | 1. **Building Chef Profiles** 2. **Giving More and More Cuisines** 3. **Study Similar Projects** 4. **Study Legality Issues** | ***importance, with high urgency factor.***  *These tasks*  *need to be*  *completed on time.*  *ONLY spend sufficient time on them as not important.*  *Don’t be*  *Diverted* |
| ***Task is of high importance, but has low urgency factor.***  *By nature long- term so need to:*   1. *Set target if none exists.* 2. *Break-up into chunks of work* | ***Low Urgency*** | 1. **Create UI** 2. **Determine**   **System’s Accuracy** | 1. **Integrate Feedback** 2. **Provide Feedbacks to Chefs** | ***Task is both low in importance & urgency.***  *Discard as many of these tasks as possible because they*  *cause great harm to your productivity.*  *Delegate if they develop*  *another’s KSA’s.* |

1. **RISK REGISTER**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Risk Description** | **Likely Cause of Risk Occurring** | **Effect on Project** | **Phase Affected** | ***Severit y Level*** | **Ability to Detect** | **Risk Rank** |
| **1** | **CHEFS NOT AVAILABLE TO FULFILL ORDER** | **MORE NUMBER OF ORDERS TO COMPLETE** | **FAILURE TO DELIVER ORDER** | **TRANSITION** | ***High*** | **EASY** | **SERIOUS** |
| **2** | **LATE DELIVERY** | **TRAFFIC** | **LATE DELIVERY OF ORDER** | **TRANSITION** | ***Low*** | **COMPLEX** | **TRIVIAL** |
| **3** | **INSUFFICIENT DATA** | **NOT ENOUGH DATA ON CUISINES AND ORDERS** | **DELAY IN PROCESSES** | **CONSTRUCTIO N** | ***Med*** | **EASY** | **MODES T** |

# T.Y. B. Tech.

**CS 3001: Software Engineering Laboratory**

## Assignment No: 6

**Online Tiffin Service**

**Product Backlog**

***1-04-2019***

**` Version 1.0**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Group Information** | | | |
| **Roll. No.** | **Gr. No.** | **Name** | **Roles** |
| **30** | **161406** | **Manaswi Lukkad** | Analyst |
| **14** | **161407** | **Priti Deo** | Designer |
| **05** | **161646** | **Sanket Kulkarni** | Developer |

**Approved By: Dr M. R. Dube**

### Academic Year: 2018-19 Semester: II

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1. **INTRODUCTION**

A product backlog stores, organizes and manages all work items that you plan to work on in the future. The key characteristics of a well-organized and managed product backlog are summarized in the image below. DEEP, INVEST and DIVE are meaningful words.

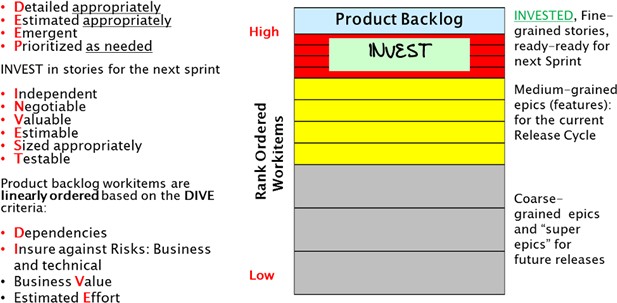


Figure 1: Characteristics of a Managed Product Backlog

The **granularity** or size of work items should be determined based on how far into the future you are planning a product, i.e., the planning horizon. It is the observation that the longer or shorter the planning horizon, the larger or smaller the work items. This makes sense as it takes a lot more effort to develop, specify and maintain a large number of small-grain work items compared to developing, specifying and maintaining a small number of large-grain work items. Smaller work items, stories, are typically developed by breaking down larger work items, epics. Stories are the unit of software design, development and value delivery.

**DEEP product backlog**

A product backlog may have several hundred or more work items, hence the acronym DEEP. Work items can be comprised of stories, defects and test sets. DEEP is acronym capturing the essence of the logical structure of product backlog.

→ **Detailed appropriately**: Work-items in the backlog are specified at an appropriate level of detail.

→ **Estimated appropriately**: Work-items in the product backlog are estimated appropriately.

→ **Emergent**: Product backlog is not frozen or static; it evolves or emerges on an on-going basis in response to product feedback, and changes in competitive, market and business. New backlog items are added, existing items are groomed (revised, refined, elaborated) or deleted or re-prioritized.

→ **Prioritized as needed**: Work-items in the backlog are linearly rank-ordered as needed.

# SPRINT PLANNING AND WORK-ITEM GRANULARITY

If the planning horizon is the next, i.e., upcoming sprint or iteration (typically 2 to 4 weeks), each Work- items is small enough to fit in a single sprint, and is 100% ready (“ready-ready”) to be worked on, as indicated in Figure 1 – see the top red-color region. A ready-ready story has already been analyzed with clear definition (User Role, Functionality, and Business Value) and associated Acceptance Criteria. Work-items planned for the next sprint are stories, defects and test sets. The Work-items in the next sprint have the highest rank order compared to Work-items in later sprints or later release cycles. I will soon explain how this rank ordering is done.

The rank order information is used to decide the order in which the team will undertake work on Work- items in a sprint backlog, and also decide which incomplete Work-items to push out to the release or product backlog at the end of a sprint time-box.

Work-items in the next sprint collectively satisfy the well-known INVEST criteria; it is a meaningful English word, as well as an interesting acronym coined by Bill Wake. Its letters represent important characteristics of Work-items in the next sprint backlog. Stories in the next sprint backlog should be:

→ **Independent of each other**: At the specification level stories are independent; they offer distinctly different functionality and don’t overlap. Moreover, at the implementation level these stories should also be as independent of each other as possible. However, sometimes certain implementation-level dependencies may be unavoidable.

→ **Negotiable**: Stories in the next sprint are always subject to negotiations and clarifications among product owner (business proxy) and the members of agile development team.

→ **Valuable**: Each story for the next sprint offers clear value or benefit to either external users or customers (outside the development team), or to the team itself, or to a stakeholder. For most products and projects, most stories offer value to external users or customers.

→ **Estimable**: From the specification of story itself, an agile team should be able to estimate the effort needed to implement the story; this estimate is in relative size terms (story points), and optionally, it can also be in time units (such as ideal staff-hours or staff-days for the whole team). Thus, stories are estimated in story points, and also often in ideal time units.

→ **Sized Appropriately**: A simpler interpretation of this criterion is that each story is Small enough to be completed and delivered in a single sprint. The letter “S” can be taken to mean Sized Appropriately; specifically, each story should take no more than N/4 staff-weeks of team effort for an N-week long sprint. Thus, for a 2-week sprint, each story should take no more than 2/4 staff-week = 0.5 staff-week = 20 staff-hours of effort. A story substantially larger than 20 staff- hours of total effort should be treated as an epic and be broken down into smaller stories. For a 4-week sprint, each story should take no more than 4/4 staff-week = 1 staff-week = 40 staff- hours of effort. If a sprint backlog has a mix of stories that are small, medium or large size stories (their average far exceeds N/4 staff-weeks), the average cycle time across all stories will increase dramatically reducing the team velocity.

→ **Testable**: Each story specification is very clear to be able to develop all test cases from its acceptance criteria (which is part of the specification).

Stories may be broken down into implementation tasks, such as Analysis, Design, Code Development, Unit Testing, Test Case Development, On-line Help, etc. These tasks need to be SMART:

* S: Specific
* M: Measurable
* A: Achievable
* R: Relevant
* T: Time-boxed (typically small enough to complete in a single day)

If a story needs to take no more than N/4 staff-week of team effort (ex. 20 staff-hours for 2-week sprints), all SMART tasks in a story should add up to no more than N/4 staff-week of team effort. If you have 5 tasks, each task on an average should take 4 hours of ideal time effort or less. Stories and its SMART tasks for the next sprint are worth INVESTing in, as the return on that INVESTment is high because they are scheduled to be worked on and delivered as working software in the next sprint itself.

# RELEASE PLANNING AND WORK GRANULARITY

If the planning horizon is an upcoming release cycle (typically 8 to 26 weeks, or 2 to 6 months long – consisting of several sprints), Work-items are “medium-grain” as shown in the middle yellow color region of Figure 1. Typically, many of these Work-items are epics; however, they should be still small enough to fit in a release cycle and can be completed over two or more sprints in a release cycle. These epics are typically called features or feature-epics. These feature-epics should still be specified with User Role, Action, Value and Acceptance Criteria formalism that is often used for specifying stories, but now you are capturing a larger functionality represented by a feature-epic. Feature-epics are divided into stories – small enough to fit in a sprint – before the sprint in which a story will be implemented.

Over the time horizon of an entire release cycle, INVESTing in stories for an entire release cycle has poor returns, because it takes a lot of effort to ensure that the INVEST criteria is being satisfied correctly for a large number of stories covering an entire release cycle, and those stories are much more likely to change over the release cycle spanning several sprints; so this kind of INVESTment may not yield expected results as stories will very likely change during an entire release cycle after they have been specified.

**Feature-epics** in a release cycle can and should be estimated in relative size terms, but without expending the effort needed to break down all feature-epics in a release cycle into individual stories. This epic-level estimation can be done by comparing relative sizes of epics.

It still makes sense to rank order feature-epics in a release cycle to decide which ones will be scheduled in Sprint 1, 2, 3, and so on. However, this assignment may change as each sprint is completed and more information and learning emerge.

# PRODUCT PLANNING AND WORK-ITEM GRANULARITY

If the product planning horizon is over multiple release cycles (typically 6 to 24 months) going beyond the current release cycle, Work-items are “**coarse-grain**” as shown in the bottom gray color region of Figure 1. These large epics or super epics require two or more release cycles to complete. These super epics may be described in plain English (bulleted text) or with screen mock-up or video or prototype or with any form of expression suitable to express the intent and value of super epics. These super epics are divided into feature-epics – small enough to fit in a single release cycle – before the release cycle in which that feature-epic will be implemented.

Over the time horizon of multiple release cycles, INVESTing in stories has even poorer returns compared to investing in stories for a single release cycle. This kind of INVESTment will not yield expected results as stories are very likely to change over much longer duration of multiple release cycles.

Large epics or super epics that need multiple release cycles to be implemented can and should be estimated in relative size terms, but without expending the effort needed to break down large epics into feature-epics, and breaking those, in turn, into stories.

DIVE the product backlog carefully

There is rarely enough time or resources to do everything. Therefore, agile teams must prioritize (rank- order, to be more precise) which stories to focus on and which lowest rank-order stories could be pushed out of scope when close to the end of a sprint. For agile development projects, you should

linearly rank-order the backlog, rather than do coarse-grain prioritization where stories and epics are lumped into a small number of priority buckets, such as Low, Medium, High, Critical priorities. Linear rank ordering (i.e., 1, 2, 3, 4 ….n) avoids inflation of priority, keeps everyone honest, and forces decisions on what is really important. It discourages the “kid-in-a-candy-shop” behaviour when the business side clamours that everything is of high-priority or of equal importance.

Note that epics and stories are conceptually different, and should not be mixed or aggregated while developing a rank order. An epic rank order is separate from a story rank order.

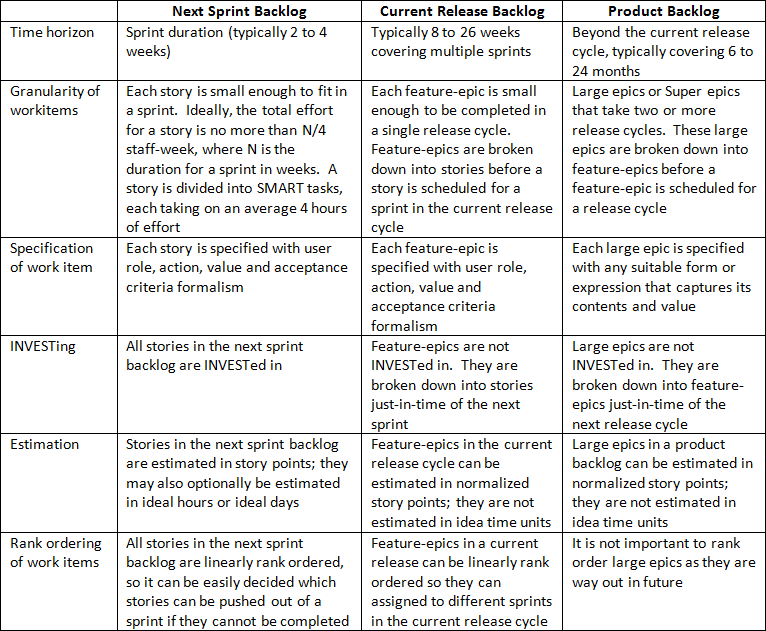
The responsibility of agile rank ordering is shared among all members of a team; however, the rank ordering effort is led by the product owner. Similar to DEEP, INVEST and SMART, DIVE is a meaningful English word, and also an acronym. Product backlog items should be linearly ordered based on the DIVE criteria, which requires careful consideration of all four factors captured in the DIVE acronym:

→ Dependencies: Even after minimizing the dependencies among stories or epics (which is always a good thing to do), there may still be few unavoidable dependencies and they will have an impact on rank ordering. If Work-item A depends on B, B needs to be rank-ordered higher than A.

→ Insure against Risks: Business as well as technical risks

→ Business Value

→ Estimated Effort



# PRODUCT BACKLOG: GOALS GRANULARITY

|  |  |
| --- | --- |
| **Goal-ID-1** | Building chef Profile |
| **Purpose** | To populate the whole database for future analysis.  The aim is to collect chef data. This shall be achieved by collecting data by personally visiting the chefs or contact  them using social media. |
| **Target Audience** | Stakeholders |
| **Status** | On-going |
| **Task Description** | 1. Gather and arrange chefs data.-R |
|  | 2. Filter rightful data-R |
|  | 3. Identify database system to preserve chefs data.-R |
|  | 4. Analyse data and create data restore point-S |
|  | 5. Extract appropriate data-R |
|  | 6. Insert extracted data-R |
|  | 7. Create cloud backup of database-R |
|  | 8.Validate User Data-R |
|  | 9.Request for profile acceptance-R |
|  | 10.Release User controls-S |
|  | 11.Give appropriate user privileges-R |
|  | 12.Secure database-S |
|  | 13.Fill appropriate information-S |
|  | 14.Check for correctness of data-S |
|  | 15.Give a strong password-S |
|  | 16.Verify account with otp-S |

|  |  |
| --- | --- |
| **Goal-ID-2** | Display daily tiffin menu |
| **Purpose** | To display variety of roasted or fried vegetables and curries we provide for the day. There are different 7 meal for 7 days of week. These meal combinations are stored in database and fetched and then displayed to  user/customer. |
| **Target Audience** | Customers |
| **Status** | On-going |
| **Task Description** | 1. Initially 7 meals are stored in database for each day of the week.-S |
|  | 2. System will provide day of the week.-R |
|  | 3. As we have the day, accordingly meal will be fetched from database.-R |
|  | 4. Cost of each component in meal combination will be  fetched from another table.-R |
|  | 5. Total value will be calculated.-S |
|  | 6. Consider Facility Limitations –R |
|  | 7. Resolve Assets Overlaps –R |
|  | 8. Maintain Past History of Assets-R |
|  | 9. Assign Facility to User –S |
|  | 10. Optimize Resources –R |
|  | 11. Store Data Appropriately-R |
|  | 12. Request for Facility.-S |
|  | 13. Request for Information of Assets-S |
|  | 14. Check Facility Allocation-S |
|  | 15. Request for History of Assets Provided-S |
|  | 16.Release control over assest -S |

|  |  |
| --- | --- |
| **Goal-ID-3** | Putting all information about different cuisines we provide. |
| **Purpose** | To display all cuisines we provide by different chefs. Initially this page is static as we have fixed number of chefs and cuisines and as business grows after some days, more chefs join the race, all chefs and their specialities in their cuisines  will be shown dynamically. |
| **Target Audience** | Customers |
| **Status** | On-Going |
| **Task Description** | 1. Chefs information is stored in database.-R |
|  | 2. Many chefs have same specialities.-R |
|  | 3. All cuisines will be displayed below daily tiffin menu on daily tiffin menu.-S |
|  | 4. User/customer can select particular cuisine and then he  will have chef option in that.-S |
|  | 5. These chefs option will be populated from database as we have chefs information and cuisines they cooked food in.-R |
|  | 6. Chefs rating will be shown next to his name.-S |
|  | 7. User/customer is supposed to choose one from list of chefs.-S |
|  | 8. Handle Payment Errors-R |
|  | 9. Maintain Payment History-R |
|  | 10. Update Successful Transactions-R |
|  | 11. Provide Various Payment Methods-S |
|  | 12. Make Payment for Bill –S |
|  | 13. Select Which Bill to Pay –S |
|  | 14. Apply for Auto-Pay Feature-S |
|  | 15. Auto-Pay Bills -R |
|  | 16 Send SMS to User. -S |

|  |  |
| --- | --- |
| **Goal-ID-4** | Take online orders from customers. |
| **Purpose** | To take online orders from customers as they don’t need to  restaurant physically to collect their tiffin or order, as food can come to their doorstep from now. |
| **Target Audience** | Customers |
| **Status** | On-going |
| **Task Description** | 1. Customer can order daily tiffin or dish from particular cuisine or both.-S |
|  | 2. If customer orders daily tiffin his name and address(that  we can fetch from his profile) will be stored in todays table. |
|  | 3. Or customer can order dish from cuisine. There he had to select one chef, then that chef will be notified and he will contact customer for further inputs.-R |
|  | 4. As customer orders cuisine option name, address and  dish, chef will be stored in daily cuisine table.-S |
|  | 5. Allow Updation Of orders -R |
|  | 6. Allow Deletion Of orders -R |
|  | 7. Form Filling By End User -S |
|  | 8. Validating Users Information -R |
|  | 9. Warn User In Case Of Inappropriate Data -R |
|  | 10. Upvote a order or Complain-S |
|  | 11. Filter Inappropriate Content –R |
|  | 12. Save All Messages With Timestamp –R |
|  | 13. Delete Too Old orders. –R |
|  | 14. Reply To a order –S |
|  | 15. Attach Media If Any-S |
|  | 16. Private Message Administrator-S |

|  |  |
| --- | --- |
| **Goal-ID-5** | Deliver food in efficient time. |
| **Purpose** | The purpose is to deliver food in minimum time possible. Once customer orders his meal he expects a food in his hands within 1 hr. So team has to study routes, maps to  deliver food in efficient time. |
| **Target Audience** | Customers |
| **Status** | On-going |
| **Task Description** | 1. Delivery squad has list of customers with addresses.-R |
|  | 2. The list already is in sequence of route which is supposed  to be followed by delivery guy.-R |
|  | 3. We have a code/algorithm to generate list.-S |
|  | 4. All today’s delivery will be fetched by system and then  minimum tsp(algorithm) will be applied.-S |
|  | 5. Team will always try to improvise the existing algorithm to deliver food in less time possible.-R |
|  | 6. Get Permission Of Owner –S |
|  | 7. View Captured Images Of order -S |
|  | 8. Collect Data About order -R |
|  | 9. Search For Past History Of order -R |
|  | 10. Notify The customer. -S |
|  | 11. Store Captured Images in Database -R |
|  | 12. Alert customer -S |
|  | 13. Do Registration Of customer -S |
|  | 14. Check for Data Correctness -R |
|  | 15.Keep Track of order -R |
|  | 16. Message customer Prior to order -S |

|  |  |
| --- | --- |
| **Goal-ID-6** | Feedback about the order. |
| **Purpose** | To get the actual customer feedback about the orders. So that tiffin service will come to know about chefs they are  paying. |
| **Target Audience** | Customers |
| **Status** | On-going |
| **Task Description** | 1. Feedback form will be displayed after every order to customer.-S |
|  | 2. Customer is supposed to fill chef’s name and rate the  order.-S |
|  | 3. This rating for each chef will be stored database.-S |
|  | 4. Periodically chef’s rating will be fetched from database  and analysed.-R |
|  | 5. The chefs who passed the bar will continue as a member in team.-R |
|  | 6. Necessary changes will be made.-S |
|  | 7. Process Provide facility -S |
|  | 8. Notify customer -R |
|  | 9. Warn customer Before Expiration Of order -R |
|  | 10. Revoke Grant Of Facility -S |
|  | 11. Ensure Overlapping Facility Timings -R |
|  | 12. Forward customer Request to Administrator -R |
|  | 13.Cancel Requested Facility -S |
|  | 14. Gain Control Over Facility -S |
|  | 15. Store Each Data With Timestamp -R |
|  | 16. Ensure No Starvation of customer -R |

**T.Y. B. Tech.**

**CS 3001: Software Engineering Laboratory**

Assignment No: 7

**Online Tiffin Service**

**User Story Cards**

***15-04-2019***

**` Version 1.0**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Group Information** | | | |
| **Roll. No.** | **Gr. No.** | **Name** | **Roles** |
| **30** | **161406** | **Manaswi Lukkad** | Analyst |
| **14** | **161407** | **Priti Deo** | Designer |
| **05** | **161646** | **Sanket Kulkarni** | Developer |

**Approved By: Dr M. R. Dube**

Academic Year: 2018-19 **Semester: II**

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# INTRODUCTION

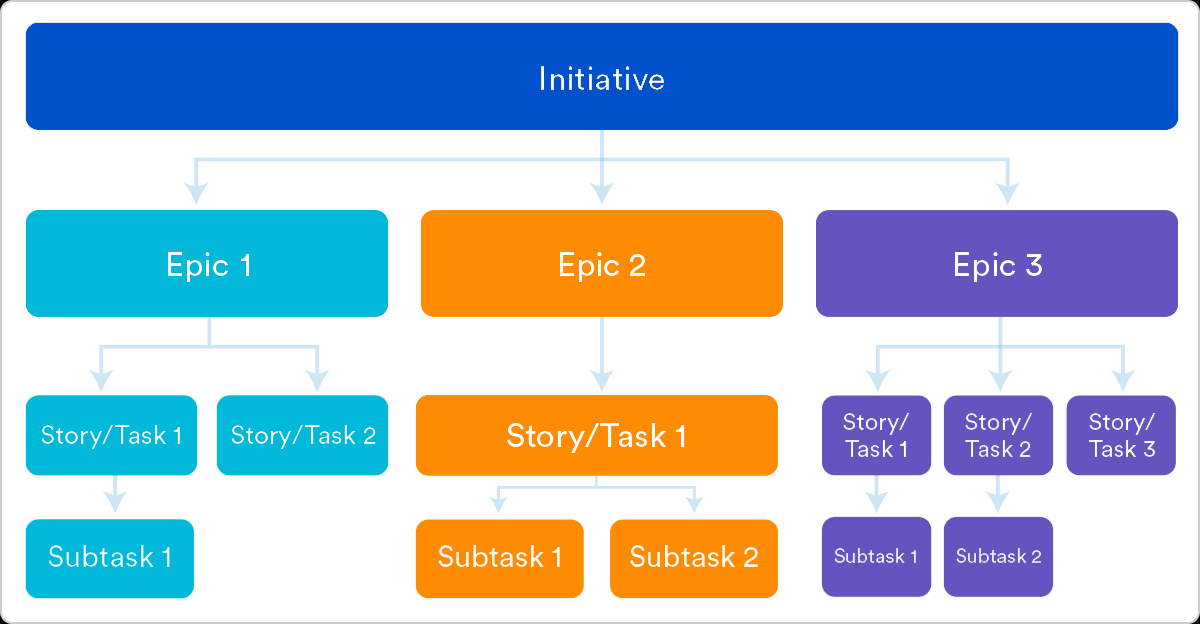
What does defining customer problems look like in an agile world? The agile manifesto reminds us that we don’t always have to do it the “traditional” way. As product managers, we should be doing whatever is required to tell the story of the customer. Try different things: experiment, explore, then do what works best for you and your team in the context that you might be working in.

* If it means you can have several discussions and sketch something on a bit of paper – then do it.
* What if you could get everyone (including the customer) in a room and do a user story mapping exercise? If that communicates the problems well, then you don’t need to go much further.
* Or what if you can visit the customer and watch them use your product in context? Could you get your engineers and designers to sit next to the customer to listen to and observe their problems?
* Instrumenting your product with analytics hooks give you aggregate, concrete data about how customers as a whole are using your product.
* Another option would be to grab the product triad (a product manager, engineer and a designer) for a quick stand-up to sketch, discuss and make some quick decisions on the spot.
* Need to explore some more? Try running a workshop where you gather key stakeholders and do lots and lots of white-boarding or even paper prototyping to dive deep into understanding the problems you are trying to solve and how you could solve those problems.

|  |  |  |  |
| --- | --- | --- | --- |
| **Epic** Large body of work, contains stories | **Story** Smallest unit of work, also known as a task | **Version** The release of software to the customer | **Sprint** Iteration where team does the work |

# EPICS AND USER STORIES

Epics are larger bodies of work that stories roll up into. An epic can span across multiple sprints and versions. Versions are different from epics, because they are a point in time where software is released to the customer. A version might contain multiple epics. Epics help teams create hierarchy and structure. Stories help teams keep track of specific details for the task at hand and can be broken down into sub-tasks.



* An **epic** is a large body of work that can be broken down into a number of smaller stories. For example, performance-related work in a release. An epic can span more than one project, if multiple projects are included in the board to which the epic belongs.
* Unlike sprints, epics often change in scope over time as a natural aspect of agile development. Epics are almost always delivered over a set of sprints. As a team learns more about an epic through development and customer feedback, user stories will be added and removed to optimize the team's release time.
* **Burndown** **charts** can also be used to visualize epics, which keep teams motivated and the executive stakeholders informed. A good epic burndown chart shows the agile nature of development. It's clear how the team is progressing as well as where the product owner added and removed user stories. Having these data points clearly visible keeps everyone on the same page and facilitates open conversation about the evolution of the product and completion forecasts. Not to mention that transparency builds trust!
* A story or **user story** is the smallest unit of work in an agile framework. It is a software system requirement that is expressed in a few short sentences, ideally using non-technical language.
* The goal of a user story is to deliver a particular value back to the customer. Note that "customers" don't have to be external end users in the traditional sense, they can also be internal customers or colleagues within your organization who depend on your team.
* **User stories** are a few sentences in simple language that outline the desired outcome. They don't go into detailed requirements.
* **Versions** are the actual releases of software out to customers. Remember, at the end of each sprint the team should be able to ship the software to customers. Versions are the curated changes the product owner actually ships.
* **Versions** are often developed over a set of sprints, much like epics. Savvy product owners may choose to deliver an epic over several versions. An epic does not have to be fully contained within a version. By delivering an epic over several versions, the product owner can learn how the market is responding to that epic and make calculated decisions about its future direction rather than doing one giant release.
* A **sprint** is a short period in which the development team implements and delivers a discrete and potentially shippable application increment, e.g. a working milestone version. If you haven't run sprints before, we recommend using a fixed two-week duration for each sprint. It's long enough to get something accomplished, but not so long that the team isn't getting regular feedback.
* In **scrum**, teams commit to complete a set of user stories during a fixed time period. Generally speaking, sprints are one, two, or four weeks long. It's up to the team to determine the length of a sprint. Once a sprint cadence is determined, the team perpetually operates on that cadence. Fixed length sprints reinforce estimation skills and enable the ability to predict the future **velocity** for the team once they have the data from several completed sprints.

Once a team commits to a set of user stories for the sprint, and the sprint is started, the scrum master is in charge of fending off changes to the user stories. This keeps the team focused and combats "s**cope creep**" (adding work to the sprint after the sprint starts). Adding work mid-sprint compromises the team's ability to forecast and estimate accurately.

At the end of each sprint, the team is required to deliver a working piece of software. In scrum, that's called a **potentially shippable increment** (PSI). The product owner ultimately decides when the PSI gets released to customers, but the work should be complete enough to be suitable for release at the end of the sprint.

In agile development, **work in progress** (WIP) limits set the maximum amount of work that can exist in each status of a workflow. Limiting the amount of work in progress makes it easier to identify inefficiency in a team's workflow. Bottlenecks in a team's delivery pipeline are clearly visible before a situation becomes dire.

# 2. USER STORIES: GOAL-1

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| **Objective-1** | **Collecting the chef information.** | |
| **Purpose** | The purpose is to acquire chef data to enable the system to create chef profile. | |
| **Target Audience** | Chefs | |
| **Status** | On-going | |
| **Role:** | **As a** developer. | |
|  | **I want to** <perform some task> | **so that I can** <achieve some goal> |
| **Task Description** | 1.Request user data | Use it to do further development. |
|  | 2.Find User Data Sources | Build user profiles. |
|  | 3.Create a preliminary database | Store the acquired user data. |
|  | 4.Create a user Data Spyder | Get updated user data. |
|  | 5.Formulate database structure | Start creating profiles. |
|  | 6.Populate User Database | Meet the preliminary objective. |
|  | 7.Generate a backup | Retrieve data in case of loss of files. |
|  | 8.Share backup with Project Team | Expect team to perform assigned tasks. |
|  | 9.Assign database privileges | Monitor the changes made to the database. |
|  | 10.Launch User Profile Page | Fulfil project deliverables. |
|  | 11.Update Database structure | Accommodate credentials in user profiles. |
|  | 12.Create log file | Keep track of changes made. |
|  | 13.Check if data has been already used | Rollback the incorrect data operations. |
|  | 14.Notify committee about the changes | Ensure consistency in system. |
|  | 15.Validate user profile | Keep it safe. |
|  | 16.Verify registered contact details | Receive validated acknowledgements. |

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| Process-1 | Fetch the information from database. | |
| Purpose | The purpose is to build the chef profile using the information provided | |
| Target Audience | Admin, Chef | |
| Status | Completed | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.set up mandatory field set | Maintain consistency in database |
|  | 2.research the chef information | Make the profiles accurate |
|  | 3.accept chef profiles inputs | Add new chefs |
|  | 4.retrieve the information from database | Collect the chef information from database |
|  | 5.decide appropriate display for the data | Create a user friendly display |
|  | 6.decide appropriate order to display the data | Create appropriate rating model |
|  | 7.update database structure | Accommodate statistics in chef profiles |
|  | 8.create log file | Keep track of changes made |

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| Process-2 | Acquire chef Information | |
| Purpose | Collect chef credentials for creating chef profile which is used to identify the chef. | |
| Target Audience | Admin, Chef | |
| Status | Completed | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Accept data entered by user | Process the data. |
|  | 2.Decide input format | Organize data easily. |
|  | 3.Encapsulate the data | Identify different users. |
|  | 4.Search for invalid data | Identify data abnormalities. |
|  | 5.Investigate searched abnormality | Verify the legitimacy. |
|  | 6.Ask user for valid credentials | Resolve the abnormality issue. |
|  | 7.Correct the found abnormality | Refine the data. |
|  | 8.Commit changes on database | Render the changes to the team. |

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| Objective-2 | Analyse the information provided | |
| Purpose | To validate all the chef information from the database | |
| Target Audience | Admin | |
| Status | Completed | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Validate chef profile attribute | Verify the database consistency |
|  | 2.Decide attribute range for the chefs | Set minimum requirements for the chefs |
|  | 3.Investigate the data and check whether it fits in the range | Compare it with existing conditions on the chef requirements |
|  | 4.Change the data where ever required according to the chefs if out of bound do not accept the data | Resolve the data out of bound in the database and remove unwanted, abnormal data |
|  | 5.Produce the correct, improvised data | Resolve the data abnormalities |
|  | 6.Check if any old data present, if yes update it | The resolved abnormality will be reflected in  Database |
|  | 7.Commit these changes on database | Render the changes to the database |
|  | 8.Print the updated data on the webpage | Provide latest verified information |
|  | 9.Consolidate outline of categorising process | Systemize procedure. |
|  | 10.Construct final categorising methodology | Begin development process. |
|  | 11.Display chefs current responsibility | Evaluate his performance |
|  | 12.Collect anonymous feedback of user | Compliment/affront the user |
|  | 13.Run background checks | Ascertain data correctness. |
|  | 14.Know the data sources | Trust the system. |
|  | 15.Manage user privileges | Limit user controls. |
|  | 16.Correspond with Analysis team | Refine the observations. |

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| Process-1 | Check The authenticity of data | |
| Purpose | To check for abnormal, illegal data | |
| Target Audience | Admin | |
| Status | Completed | |
| Role: | **As a** *<type of user>* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Organise the data provided | Easily analysis the data |
|  | 2.Check the data boundaries with given restrictions | Check the correctness of the data |
|  | 3. Check the other details provided by the chef  Like aadhar no, pan no etc | To check the integrity of the documents provided |
|  | 4.Update if any abnormalities encounter | Resolve the data abnormalities |
|  | 5.Reflect the changes on database | Render the changes to the database |
|  | 6.Consider all users with comparable importance | take unbiased decision |
|  | 7.Filter profiles indicating appropriate users | decide capable chef |
|  | 8.Filter profiles indicating appropriate characteristics | find suitable chef. |

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| Process-2 | Launch chef Profile | |
| Purpose | To create user friendly chef profile page | |
| Target Audience | Customers | |
| Status | completed | |
| Role: | **As a** society committee member | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.To decide the template of page | Make it interactive interface |
|  | 2.Research templates | Select appropriate template |
|  | 3.Design GUI | Make it attractive. |
|  | 4.Use sufficient User Data | Optimise the space |
|  | 5.Use unique template for different type of users | Make it unambiguous |
|  | 6.Display sufficient information about user | Make it enough informative |
|  | 7.Keep data updated | Make it accurate |
|  | 8.Delete irrelevant user profiles | Remove redundancy |

# 4. USER STORIES: GOAL-2

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| Objective-1 | Display daily tiffin menus | |
| Purpose | To display the daily tiffin menu to the customer | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Retrieve the daily tiffin menu form database | Display the menu on the webpage |
|  | 2.The photo for everyday menu will be displayed on the top of page | The menu can be seen by the customer on top of the page. |
|  | 3.The extra dishes available to order will be changed manually everyday | Display the extra dishes available for the customer to order |
|  | 4.The customer can place their order personally to a selected chef | Satisfy the customer with his favourite dishes from a particular chef |
|  | 5.The daily tiffin menu will be changed according to the trends in market. | Meet the customer needs according to their taste and the new market trends |
|  | 6.Customer can give their special request while placing the order | To provide the food according to customer’s wish |
|  | 7. Survey market values | Negotiate new contracts and transfer fees. |
|  | 8. Gather information periodically | Assure safe,accurate service |
|  | 9. Establish resource background | Expect transparency. |
|  | 10. Administer information extraction | Put system to good use. |
|  | 11. Update Database structure | accommodate credentials in user profiles. |
|  | 12.Process registration form | Extract exact information |
|  | 13. Provide contact details of responsible person. | People can contact in emergency. |
|  | 14.Scrutinize Resources | Flawless organization |
|  | 15.Take resource photographs | Identify resources |
|  | 16.Search for inadequate data | Identify missing and null data |

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| Process-1 | Check the authenticity of menu | |
| Purpose | To check for abnormal, illegal data | |
| Target Audience | Admin | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Organise the data provided | Easily analysis the data |
|  | 2. Check the integrity of the menu | Check the correctness of the data |
|  | 3.Check the feasibility of the menu | Check whether the menu is feasible |
|  | 4.Check if the cuisine is present in latest trends | Check if the data is consistent with latest trending dishes |
|  | 5.Check the prices of the food items to be affordable | To keep the prices within asking range for better sale |
|  | 6. Update if any abnormalities encounter | Resolve the data abnormalities |
|  | 7.Reflect the changes on database | Render the changes to the database |
|  | 8.Print the updated data on page | Provide latest verified information |

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| Process-2 | Change the menu everyday taking input from database | |
| Purpose | To change the menu provided on daily basis | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Generate the menu database according to customer need | To keep the menu user friendly. |
|  | 2. Check if the cuisine included is in latest trends of customers | To meet the latest trends of the customers |
|  | 3.Change the menu weekly according to the cuisine in demand based on the orders placed | To keep up with the customer demands |
|  | 4.Menu generated should be customer friendly both veg and non-veg | To increase the demand of the tiffin and to satisfy the customer needs |
|  | 5.Check the database for any old entries. | Reflect the new changes made on database |
|  | 6.set affordable prices to the updated cuisines | To increase the publicity of the website |
|  | 7. Schedule maintenance plan. | Maintain resource quality. |
|  | 8. Keep database updated | Carryout operations smoothly. |

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| Objective-2 | Demonstrate Facilities per user | |
| Purpose | To provide facility to every user. | |
| Target Audience | Society Members | |
| Status | On-going | |
| Role: | **As a**Society Member | |
|  | **I want to** *<perform some task>* | **I want to** *<perform some task>* |
| Task Description | 1.Gather user requirements | Manage resource allocation |
|  | 2.Examine resource requirements per user | distribute facilities. |
|  | 3.Examine resource utilization. | Monitor resource usage. |
|  | 4.Identify shortage of resources | Schedule resources. |
|  | 5.Keep track of resource utilization | Use this information for security purposes. |
|  | 6.Provide details of responsible person. | User can carry respective business. |
|  | 7.Perform resource maintenance | To provide quality service. |
|  | 8.Update database | Keep track of details |
|  | 9.Avoid monopolization of resource | Provide fair chance of utilization. |
|  | 10.Record resource usage | Sue for better service |
|  | 11.Create facility groups according to attribute | Use the grouped data for better statistical model |
|  | 12.Demonstrate facility groups | Usage of groups is ensured |
|  | 13.Update database | Manage efficiently |
|  | 14.Allocate facilities | Enough utilization of facilities |
|  | 15.provide the rule book regarding resources | Help users to follow the rules |
|  | 16.Provide precise information | Give information about resources |

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| Process-1 | Acquire various food Facilities | |
| Purpose | Take Online Orders from the customers | |
| Target Audience | Customers | |
| Status | Ongoing | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **I want to** *<perform some task>* |
| Task Description | 1.provide a payment gateway | Build a user friendly payment portal |
|  | 2.To promote cashless transactions | Can contribute towards digital india |
|  | 3.Examine attribute-wise data | Extract attribute-wise resources. |
|  | 4.Extract attributes for grouping | Extract attribute-wise resource groups. |
|  | 5.List out all food facilities. | To demonstrate facilities. |
|  | 7. List out available food facilities | To provide appropriate information. |
|  | 8.Inspect food facilities periodically. | To maintain the calibre of facility. |

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| Process-2 | Map the Facilities per user | |
| Purpose | To provide facilities to the user. | |
| Target Audience | Customers | |
| Status | On-going | |
| Role: | **As a**society committee member | |
|  | **I want to** *<perform some task>* | **I want to** *<perform some task>* |
| Task Description | 1.Display Card Details after the user has added an item | Manipulate Data to find the final cost |
|  | 2.Make the Cart Dynamic so the User is not Directed to a New Page | Create a user oriented software |
|  | 3.Provide different payment options | Give the user the option of paying through Credit/Debit Cards |
|  | 4.Connect to the Banks if required | To Track payments |
|  | 5.Generate an E-Bill | Create a new Session for the user. |
|  | 6.Accept Payments via Cash and simultaneously update the order to completion | Create a user oriented software |
|  | 7.Provide different payment options | Give the user the option of paying through Credit/Debit Cards |
|  | 8.Avoid starvation | Give fair chance to everyone. |

# 5. USER STORIES: GOAL-3

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| Objective-1 | Efficient delivery of the order | |
| Purpose | To deliver the tiffin to the customers in shortest possible time | |
| Target Audience | Admin, Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **So that I can** *<achieve some goal>* |
| Task Description | 1.Set the range for free-delivery within Pune | Efficiently deliver the order with a profit |
|  | 2.Set the rates for delivery outside the decided range of delivery | Decide the Rates according the petrol consumption according to the distance from source |
|  | 3.Assingn delivery boys to areas in Pune according to their request. | So that they can deliver in the area they are familiar to for efficient delivery. |
|  | 4.Provide the address and google map location to delivery boy. | Apply different maintenance charges to them |
|  | 5.Maintain report of maintenance charges | Check that whoever has not paid it. |
|  | 6.Keep record of parking space per flat | Include charges for parking. |
|  | 7.Distinguish charges in different types of fees | Generate bill for each flat |
|  | 8.Keep record of due dates | Provide discount/charge interest to user. |
|  | 9.Keep previous payment records | Manage previous dues in current bill. |
|  | 10.Find the saving amount for society | Use it further for other purposes. |
|  | 11.Generate receipts for each flat | Have record of each payment. |
|  | 12.Store the details in database | Use it further. |
|  | 13.Keep track of expenditure for different events | Include those charges in maintenance. |
|  | 14.Record staff salary details | Include reserved charges. |
|  | 15.Compare with previous financial years | Take any financial decisions. |
|  | 16.Find average cost per house | Apply charges to each house. |

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| Process-1 | Google maps api will be provided to the delivery man for faster and hassle-free delivery. | |
| Purpose | To provide the google api with address of the delivery point to deliver the package without any problem. | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.The location of delivery will be provided to the delivery man | The delivery man can go to the location without any difficulty |
|  | 2.One location to be showed at a time | Not to confuse the delivery man |
|  | 3.Decide due dates | Complete all payments in specific period. |
|  | 4.Distinguish users | Apply associated charges. |
|  | 5.Estimate total maintenance charges | Take any financial decisions according to that. |
|  | 6.Generate payment history | Use it for further reference. |
|  | 7.Notify user for payment | Collect bills from all users within the given time. |
|  | 8.Check income for each flat | Provide financial aid. |

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| Process-2 | Email notification after successful delivery | |
| Purpose | To give a confirmation mail to the customers along with link to feedback form | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Send a confirmation email to the customer | Apply conditions for charges. |
|  | 2.Send a feedback form in the email | Apply maintenance cost. |
|  | 3.Categorize user | Apply non occupancy charges. |
|  | 4.Keep track of resource utilization | Include resource rent. |
|  | 5.Maintain financial history | Decide sinking fund amount. |
|  | 6.Keep track of damages | Include repair fund. |
|  | 7.Store details of previous tenants | Apply NOC fees. |
|  | 8.Keep track of deadlines | Consider interest amount. |

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| Objective-2 | To build chef profile from feedback form | |
| Purpose | To check the performance of the . | |
| Target Audience | Stakeholders | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.To check the quality and taste of food by a chef | Assign jobs to the chef |
|  | 2.To verify the specialities of the chef | To provide authentic information |
|  | 3.Change the menu weekly according to the cuisine in demand based on the orders placed | To keep up with the customer demands |
|  | 4.Menu generated should be customer friendly both veg and non-veg | To increase the demand of the tiffin and to satisfy the customer needs |
|  | 5.Check the database for any old entries. | Reflect the new changes made on database |
|  | 6.set affordable prices to the updated cuisines | To increase the publicity of the website |
|  | 7.Send reminders | Inform members about payment |
|  | 8.Generate notifications | Keep track of important dates. |
|  | 9.Generate receipts | Keep track of all internal transactions(maintenance cost, staff salaries) |
|  | 10.Maintain status of payments(paid,has to pay) | Have record of payments to be done. |
|  | 11.Calculate and store overall expenditure | Estimate total maintenance cost per flat |
|  | 12.Provide an interface | Manage maintenance related work using system |
|  | 13.Keep track of expenditure for different events | Include those charges in maintenance. |
|  | 14.Record staff salary details | Include reserved charges. |
|  | 15.Record payment details | Generate statistics. |
|  | 16.List payments has to be done | Complete all the payments. |

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| Process-1 | Cart detail Maintenance | |
| Purpose | Cart Details after order | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *<type of user>* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Display Card Details after the user has added an item | Manipulate Data to find the final cost |
|  | 2.Make the Cart Dynamic so the User is not Directed to a New Page | Make a user-Oriented Software |
|  | 3.Provide an Option To View cart anytime they wish to | Provide a Platform for efficient ordering system |
|  | 4.Analyze previous expenditure | Estimate sinking fund |
|  | 5.Keep track on expenditure on resources | Estimate resource rent per usage |
|  | 6.Keep count of houses on rent | Estimate non occupancy charges |
|  | 7.Keep record of extra expenses | Estimate charges related to these |
|  | 8.Keep track of dates of payments | Estimate discount/fine |

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| Process-2 | Apply Maintenance Charges | |
| Purpose | Provide payment gateway with various options of payment | |
| Target Audience | Customers | |
| Status | On-going | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Provide different payment options | Create a user oriented software |
|  | 2.Connect to the Banks if required | Give the user the option of paying through Credit/Debit Cards |
|  | 3.Generate an E-Bill | To Track payments |
|  | 4.Accept Payments via Cash and simultaneously update the order to completion | Create a new Session for the user. |
|  | 5.Maintain financial history | Decide sinking fund amount. |
|  | 6.Keep track of damages | Include repair fund. |
|  | 7.Store details of previous tenants | Apply NOC fees. |
|  | 8.Keep track of deadlines | Consider interest amount. |

# 6.USER STORIES: GOAL-4

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| **Objective-1** | **Collecting the chef information.** | |
| **Purpose** | The purpose is to acquire chef data to enable the system to create chef profile. | |
| **Target Audience** | Chefs | |
| **Status** | On-going | |
| **Role:** | **As a** developer. | |
|  | **I want to** <perform some task> | **so that I can** <achieve some goal> |
| **Task Description** | 1.Request user data | Use it to do further development. |
|  | 2.Find User Data Sources | Build user profiles. |
|  | 3.Create a preliminary database | Store the acquired user data. |
|  | 4.Create a user Data Spyder | Get updated user data. |
|  | 5.Formulate database structure | Start creating profiles. |
|  | 6.Populate User Database | Meet the preliminary objective. |
|  | 7.Generate a backup | Retrieve data in case of loss of files. |
|  | 8.Share backup with Project Team | Expect team to perform assigned tasks. |
|  | 9.Assign database privileges | Monitor the changes made to the database. |
|  | 10.Launch User Profile Page | Fulfil project deliverables. |
|  | 11.Update Database structure | Accommodate credentials in user profiles. |
|  | 12.Create log file | Keep track of changes made. |
|  | 13.Check if data has been already used | Rollback the incorrect data operations. |
|  | 14.Notify committee about the changes | Ensure consistency in system. |
|  | 15.Validate user profile | Keep it safe. |
|  | 16.Verify registered contact details | Receive validated acknowledgements. |

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| Process-1 | Fetch the information from database. | |
| Purpose | The purpose is to build the chef profile using the information provided | |
| Target Audience | Admin, Chef | |
| Status | Completed | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.set up mandatory field set | Maintain consistency in database |
|  | 2.research the chef information | Make the profiles accurate |
|  | 3.accept chef profiles inputs | Add new chefs |
|  | 4.retrieve the information from database | Collect the chef information from database |
|  | 5.decide appropriate display for the data | Create a user friendly display |
|  | 6.decide appropriate order to display the data | Create appropriate rating model |
|  | 7.update database structure | Accommodate statistics in chef profiles |
|  | 8.create log file | Keep track of changes made |

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| Process-2 | Acquire chef Information | |
| Purpose | Collect chef credentials for creating chef profile which is used to identify the chef. | |
| Target Audience | Admin, Chef | |
| Status | Completed | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Accept data entered by user | Process the data. |
|  | 2.Decide input format | Organize data easily. |
|  | 3.Encapsulate the data | Identify different users. |
|  | 4.Search for invalid data | Identify data abnormalities. |
|  | 5.Investigate searched abnormality | Verify the legitimacy. |
|  | 6.Ask user for valid credentials | Resolve the abnormality issue. |
|  | 7.Correct the found abnormality | Refine the data. |
|  | 8.Commit changes on database | Render the changes to the team. |

|  |  |  |
| --- | --- | --- |
| Objective-2 | Analyse the information provided | |
| Purpose | To validate all the chef information from the database | |
| Target Audience | Admin | |
| Status | Completed | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Validate chef profile attribute | Verify the database consistency |
|  | 2.Decide attribute range for the chefs | Set minimum requirements for the chefs |
|  | 3.Investigate the data and check whether it fits in the range | Compare it with existing conditions on the chef requirements |
|  | 4.Change the data where ever required according to the chefs if out of bound do not accept the data | Resolve the data out of bound in the database and remove unwanted, abnormal data |
|  | 5.Produce the correct, improvised data | Resolve the data abnormalities |
|  | 6.Check if any old data present, if yes update it | The resolved abnormality will be reflected in  Database |
|  | 7.Commit these changes on database | Render the changes to the database |
|  | 8.Print the updated data on the webpage | Provide latest verified information |
|  | 9.Consolidate outline of categorising process | Systemize procedure. |
|  | 10.Construct final categorising methodology | Begin development process. |
|  | 11.Display chefs current responsibility | Evaluate his performance |
|  | 12.Collect anonymous feedback of user | Compliment/affront the user |
|  | 13.Run background checks | Ascertain data correctness. |
|  | 14.Know the data sources | Trust the system. |
|  | 15.Manage user privileges | Limit user controls. |
|  | 16.Correspond with Analysis team | Refine the observations. |

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| --- | --- | --- |
| Process-1 | Check The authenticity of data | |
| Purpose | To check for abnormal, illegal data | |
| Target Audience | Admin | |
| Status | Completed | |
| Role: | **As a** *<type of user>* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Organise the data provided | Easily analysis the data |
|  | 2.Check the data boundaries with given restrictions | Check the correctness of the data |
|  | 3. Check the other details provided by the chef  Like aadhar no, pan no etc | To check the integrity of the documents provided |
|  | 4.Update if any abnormalities encounter | Resolve the data abnormalities |
|  | 5.Reflect the changes on database | Render the changes to the database |
|  | 6.Consider all users with comparable importance | take unbiased decision |
|  | 7.Filter profiles indicating appropriate users | decide capable chef |
|  | 8.Filter profiles indicating appropriate characteristics | find suitable chef. |

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| --- | --- | --- |
| Process-2 | Launch chef Profile | |
| Purpose | To create user friendly chef profile page | |
| Target Audience | Customers | |
| Status | completed | |
| Role: | **As a** society committee member | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.To decide the template of page | Make it interactive interface |
|  | 2.Research templates | Select appropriate template |
|  | 3.Design GUI | Make it attractive. |
|  | 4.Use sufficient User Data | Optimise the space |
|  | 5.Use unique template for different type of users | Make it unambiguous |
|  | 6.Display sufficient information about user | Make it enough informative |
|  | 7.Keep data updated | Make it accurate |
|  | 8.Delete irrelevant user profiles | Remove redundancy |

# 7.USER STORIES: GOAL-5

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| Objective-1 | Display daily tiffin menus | |
| Purpose | To display the daily tiffin menu to the customer | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Retrieve the daily tiffin menu form database | Display the menu on the webpage |
|  | 2.The photo for everyday menu will be displayed on the top of page | The menu can be seen by the customer on top of the page. |
|  | 3.The extra dishes available to order will be changed manually everyday | Display the extra dishes available for the customer to order |
|  | 4.The customer can place their order personally to a selected chef | Satisfy the customer with his favourite dishes from a particular chef |
|  | 5.The daily tiffin menu will be changed according to the trends in market. | Meet the customer needs according to their taste and the new market trends |
|  | 6.Customer can give their special request while placing the order | To provide the food according to customer’s wish |
|  | 7. Survey market values | Negotiate new contracts and transfer fees. |
|  | 8. Gather information periodically | Assure safe,accurate service |
|  | 9. Establish resource background | Expect transparency. |
|  | 10. Administer information extraction | Put system to good use. |
|  | 11. Update Database structure | accommodate credentials in user profiles. |
|  | 12.Process registration form | Extract exact information |
|  | 13. Provide contact details of responsible person. | People can contact in emergency. |
|  | 14.Scrutinize Resources | Flawless organization |
|  | 15.Take resource photographs | Identify resources |
|  | 16.Search for inadequate data | Identify missing and null data |

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| --- | --- | --- |
| Process-1 | Check the authenticity of menu | |
| Purpose | To check for abnormal, illegal data | |
| Target Audience | Admin | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Organise the data provided | Easily analysis the data |
|  | 2. Check the integrity of the menu | Check the correctness of the data |
|  | 3.Check the feasibility of the menu | Check whether the menu is feasible |
|  | 4.Check if the cuisine is present in latest trends | Check if the data is consistent with latest trending dishes |
|  | 5.Check the prices of the food items to be affordable | To keep the prices within asking range for better sale |
|  | 6. Update if any abnormalities encounter | Resolve the data abnormalities |
|  | 7.Reflect the changes on database | Render the changes to the database |
|  | 8.Print the updated data on page | Provide latest verified information |

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| Process-2 | Change the menu everyday taking input from database | |
| Purpose | To change the menu provided on daily basis | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Generate the menu database according to customer need | To keep the menu user friendly. |
|  | 2. Check if the cuisine included is in latest trends of customers | To meet the latest trends of the customers |
|  | 3.Change the menu weekly according to the cuisine in demand based on the orders placed | To keep up with the customer demands |
|  | 4.Menu generated should be customer friendly both veg and non-veg | To increase the demand of the tiffin and to satisfy the customer needs |
|  | 5.Check the database for any old entries. | Reflect the new changes made on database |
|  | 6.set affordable prices to the updated cuisines | To increase the publicity of the website |
|  | 7. Schedule maintenance plan. | Maintain resource quality. |
|  | 8. Keep database updated | Carryout operations smoothly. |

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| --- | --- | --- |
| Objective-2 | Demonstrate Facilities per user | |
| Purpose | To provide facility to every user. | |
| Target Audience | Society Members | |
| Status | On-going | |
| Role: | **As a**Society Member | |
|  | **I want to** *<perform some task>* | **I want to** *<perform some task>* |
| Task Description | 1.Gather user requirements | Manage resource allocation |
|  | 2.Examine resource requirements per user | distribute facilities. |
|  | 3.Examine resource utilization. | Monitor resource usage. |
|  | 4.Identify shortage of resources | Schedule resources. |
|  | 5.Keep track of resource utilization | Use this information for security purposes. |
|  | 6.Provide details of responsible person. | User can carry respective business. |
|  | 7.Perform resource maintenance | To provide quality service. |
|  | 8.Update database | Keep track of details |
|  | 9.Avoid monopolization of resource | Provide fair chance of utilization. |
|  | 10.Record resource usage | Sue for better service |
|  | 11.Create facility groups according to attribute | Use the grouped data for better statistical model |
|  | 12.Demonstrate facility groups | Usage of groups is ensured |
|  | 13.Update database | Manage efficiently |
|  | 14.Allocate facilities | Enough utilization of facilities |
|  | 15.provide the rule book regarding resources | Help users to follow the rules |
|  | 16.Provide precise information | Give information about resources |

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| Process-1 | Acquire various food Facilities | |
| Purpose | Take Online Orders from the customers | |
| Target Audience | Customers | |
| Status | Ongoing | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **I want to** *<perform some task>* |
| Task Description | 1.provide a payment gateway | Build a user friendly payment portal |
|  | 2.To promote cashless transactions | Can contribute towards digital india |
|  | 3.Examine attribute-wise data | Extract attribute-wise resources. |
|  | 4.Extract attributes for grouping | Extract attribute-wise resource groups. |
|  | 5.List out all food facilities. | To demonstrate facilities. |
|  | 7. List out available food facilities | To provide appropriate information. |
|  | 8.Inspect food facilities periodically. | To maintain the calibre of facility. |

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| --- | --- | --- |
| Process-2 | Map the Facilities per user | |
| Purpose | To provide facilities to the user. | |
| Target Audience | Customers | |
| Status | On-going | |
| Role: | **As a**society committee member | |
|  | **I want to** *<perform some task>* | **I want to** *<perform some task>* |
| Task Description | 1.Display Card Details after the user has added an item | Manipulate Data to find the final cost |
|  | 2.Make the Cart Dynamic so the User is not Directed to a New Page | Create a user oriented software |
|  | 3.Provide different payment options | Give the user the option of paying through Credit/Debit Cards |
|  | 4.Connect to the Banks if required | To Track payments |
|  | 5.Generate an E-Bill | Create a new Session for the user. |
|  | 6.Accept Payments via Cash and simultaneously update the order to completion | Create a user oriented software |
|  | 7.Provide different payment options | Give the user the option of paying through Credit/Debit Cards |
|  | 8.Avoid starvation | Give fair chance to everyone. |

# 8.USER STORIES: GOAL-6

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| Objective-1 | Efficient delivery of the order | |
| Purpose | To deliver the tiffin to the customers in shortest possible time | |
| Target Audience | Admin, Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **So that I can** *<achieve some goal>* |
| Task Description | 1.Set the range for free-delivery within Pune | Efficiently deliver the order with a profit |
|  | 2.Set the rates for delivery outside the decided range of delivery | Decide the Rates according the petrol consumption according to the distance from source |
|  | 3.Assingn delivery boys to areas in Pune according to their request. | So that they can deliver in the area they are familiar to for efficient delivery. |
|  | 4.Provide the address and google map location to delivery boy. | Apply different maintenance charges to them |
|  | 5.Maintain report of maintenance charges | Check that whoever has not paid it. |
|  | 6.Keep record of parking space per flat | Include charges for parking. |
|  | 7.Distinguish charges in different types of fees | Generate bill for each flat |
|  | 8.Keep record of due dates | Provide discount/charge interest to user. |
|  | 9.Keep previous payment records | Manage previous dues in current bill. |
|  | 10.Find the saving amount for society | Use it further for other purposes. |
|  | 11.Generate receipts for each flat | Have record of each payment. |
|  | 12.Store the details in database | Use it further. |
|  | 13.Keep track of expenditure for different events | Include those charges in maintenance. |
|  | 14.Record staff salary details | Include reserved charges. |
|  | 15.Compare with previous financial years | Take any financial decisions. |
|  | 16.Find average cost per house | Apply charges to each house. |

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| Process-1 | Google maps api will be provided to the delivery man for faster and hassle-free delivery. | |
| Purpose | To provide the google api with address of the delivery point to deliver the package without any problem. | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.The location of delivery will be provided to the delivery man | The delivery man can go to the location without any difficulty |
|  | 2.One location to be showed at a time | Not to confuse the delivery man |
|  | 3.Decide due dates | Complete all payments in specific period. |
|  | 4.Distinguish users | Apply associated charges. |
|  | 5.Estimate total maintenance charges | Take any financial decisions according to that. |
|  | 6.Generate payment history | Use it for further reference. |
|  | 7.Notify user for payment | Collect bills from all users within the given time. |
|  | 8.Check income for each flat | Provide financial aid. |

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| Process-2 | Email notification after successful delivery | |
| Purpose | To give a confirmation mail to the customers along with link to feedback form | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Send a confirmation email to the customer | Apply conditions for charges. |
|  | 2.Send a feedback form in the email | Apply maintenance cost. |
|  | 3.Categorize user | Apply non occupancy charges. |
|  | 4.Keep track of resource utilization | Include resource rent. |
|  | 5.Maintain financial history | Decide sinking fund amount. |
|  | 6.Keep track of damages | Include repair fund. |
|  | 7.Store details of previous tenants | Apply NOC fees. |
|  | 8.Keep track of deadlines | Consider interest amount. |

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| --- | --- | --- |
| Objective-2 | To build chef profile from feedback form | |
| Purpose | To check the performance of the . | |
| Target Audience | Stakeholders | |
| Status | Completed | |
| Role: | **As a** *developer* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.To check the quality and taste of food by a chef | Assign jobs to the chef |
|  | 2.To verify the specialities of the chef | To provide authentic information |
|  | 3.Change the menu weekly according to the cuisine in demand based on the orders placed | To keep up with the customer demands |
|  | 4.Menu generated should be customer friendly both veg and non-veg | To increase the demand of the tiffin and to satisfy the customer needs |
|  | 5.Check the database for any old entries. | Reflect the new changes made on database |
|  | 6.set affordable prices to the updated cuisines | To increase the publicity of the website |
|  | 7.Send reminders | Inform members about payment |
|  | 8.Generate notifications | Keep track of important dates. |
|  | 9.Generate receipts | Keep track of all internal transactions(maintenance cost, staff salaries) |
|  | 10.Maintain status of payments(paid,has to pay) | Have record of payments to be done. |
|  | 11.Calculate and store overall expenditure | Estimate total maintenance cost per flat |
|  | 12.Provide an interface | Manage maintenance related work using system |
|  | 13.Keep track of expenditure for different events | Include those charges in maintenance. |
|  | 14.Record staff salary details | Include reserved charges. |
|  | 15.Record payment details | Generate statistics. |
|  | 16.List payments has to be done | Complete all the payments. |

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| Process-1 | Cart detail Maintenance | |
| Purpose | Cart Details after order | |
| Target Audience | Customers | |
| Status | Completed | |
| Role: | **As a** *<type of user>* | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Display Card Details after the user has added an item | Manipulate Data to find the final cost |
|  | 2.Make the Cart Dynamic so the User is not Directed to a New Page | Make a user-Oriented Software |
|  | 3.Provide an Option To View cart anytime they wish to | Provide a Platform for efficient ordering system |
|  | 4.Analyze previous expenditure | Estimate sinking fund |
|  | 5.Keep track on expenditure on resources | Estimate resource rent per usage |
|  | 6.Keep count of houses on rent | Estimate non occupancy charges |
|  | 7.Keep record of extra expenses | Estimate charges related to these |
|  | 8.Keep track of dates of payments | Estimate discount/fine |

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| Process-2 | Apply Maintenance Charges | |
| Purpose | Provide payment gateway with various options of payment | |
| Target Audience | Customers | |
| Status | On-going | |
| Role: | **As a**developer | |
|  | **I want to** *<perform some task>* | **so that I can** *<achieve some goal>* |
| Task Description | 1.Provide different payment options | Create a user oriented software |
|  | 2.Connect to the Banks if required | Give the user the option of paying through Credit/Debit Cards |
|  | 3.Generate an E-Bill | To Track payments |
|  | 4.Accept Payments via Cash and simultaneously update the order to completion | Create a new Session for the user. |
|  | 5.Maintain financial history | Decide sinking fund amount. |
|  | 6.Keep track of damages | Include repair fund. |
|  | 7.Store details of previous tenants | Apply NOC fees. |
|  | 8.Keep track of deadlines | Consider interest amount. |

**Iteration Backlog**

**User Stories Goal 1-Create Survival Centre Profile**

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| --- | --- | --- | --- | --- |
| **Objective-1** | **Register Survival Centre** | **SP** | **IC** | **IP** |
|  | 13. As a Survival Centre Manager I want to Register employee so that I can Anticipate team to perform assigned tasks. | 13 | I1=20 | 1 |
|  | 3. As a survival centre manager I want to register food survival centre so that I can build Online tiffin service profile. | 5 |
|  | 9.As a Survival Centre Manager I want to Upload Centre Documents so that I can Authenticate From Centre | 2 |
|  | 1.As a Survival Centre Manager I want to find online survival Care so that I can provide Services to food online tiffin service s. | 3 | I2=20 | 2 |
|  | 2.As a Survival Centre Manager I want to Select Registration Option so that I can register Survival Online tiffin service | 8 |
|  | 4.As a Survival Centre Manager I want to Read terms and conditions so that I can Decide further Actions. | 3 |
|  | 5.As a Survival Centre Manager I want to Accept Terms and condition so that I can Move to next step. | 1 |
|  | 7.As a Survival Centre Manager I want to Submit Centre data  Confirm the registration process | 5 |
|  | 12.As a Survival Centre Manager I want to Choose Employee type so that I can Make entry of employee | 8 | I3=19 | 3 |
|  | 14.As a Survival Centre Manager I want to Upload Employee Qualification Details so that I can Authenticate Employee | 8 |
|  | 6.As a Survival Centre Manager I want to Fill detailed information so that I can Proceed the registration process. | 3 |
|  | 15.As a Survival Centre Manager I want to Assign User Controls so that I can Avail assigned services to employee | 13 | I4=18 | 4 |
|  | 16.As a Survival Centre Manager I want to Verify registered email Id so that I can Receive validated acknowledgement | 5 |
|  | 10.As a Survival Centre Manager I want to Arrange Managers Meeting so that I can Finalize the Field of centre Interest | 5 | I5=18 | 5 |
|  | 11As a Survival Centre Manager I want to Validate Centre Profile so that I can Access centre services | 5 |
|  | 16.As a Survival Centre Manager I want to Maintain Service Log so that I can Track Survival Online tiffin service activities | 8 |

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| **Process-1** | **Accumulate Centre Information** | **SP** | **IC** | **IP** |
|  | 8.As a system Administrator I want to take a tour so that I can verify facility details | 18 | I1=20 | 1 |
|  | 9.As a system Administrator I want to know service time  so that I can provide it to user | 2 |
|  | 3..As a system Administrator I want to fetch government database so that I can cross check entered centre data | 13 | I2=20 | 2 |
|  | 1.As a system Administrator I want to Access Survival Centres Profiles so that I can Avail centre basic information. | 5 |
|  | 11.As a system Administrator I want to feed service details  so that I can avail on-going processes | 2 |
|  | 4.As a system Administrator I want to run offline survey  so that I can compare with online data | 8 | I3=20 | 3 |
|  | 5.As a system Administrator I want to access centre location so that I can locate survival online tiffin service | 5 |
|  | 6.As a system Administrator I want to plot marker so that I can find exact location of the centre | 5 |
|  | 14.As a system Administrator I want to study survival centre details so that I can categorize survival centre according to field of interest | 2 |
|  | 7.As a system Administrator I want to enquire about more facilities so that I can add details to the profile. | 8 | I4=19 | 4 |
|  | 10.As a system Administrator I want to accommodate available facilities so that I can access available facility | 8 |
|  | 3.As a system Administrator I want to filter specific food online tiffin service so that I can scrutinize the data | 3 |
|  | 12.As a system Administrator I want to maintain record changes so that I can keep track of every action done by the system | 8 | I5=18 | 5 |
|  | 13.As a system Administrator I want to assemble centre data so that I can access the information centres easily | 5 |
|  | 16.As a system Administrator I want to notify centre registration so that I can convey it to the centres. | 5 |
|  | 15.As a system Administrator I want to give limited access so that I can maintain the privacy of the centre details | 8 | I6=16 | 6 |
|  | 17.As a system Administrator I want to notify illegal document so that I can request for valid documents | 8 |

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| **Process-2** | **Check Centre Authenticity** | **SP** | **IC** | **IP** |
|  | 1.As a system Administrator I want to run offline check so that i can authenticate online details. | 5 | I1=20 | 1 |
|  | 2.As a system Administrator I want to ask online tiffin service photograph  so that I can certify centre details | 2 |
|  | 5.As a system Administrator I want to investigate provided documents  so that I can verify the legitimacy. | 13 |
|  | 4.As a system Administrator I want to access user review so that I can  check authenticity of service availability | 5 | I2=20 | 2 |
|  | 7.As a system Administrator I want to enquire service execution  so that I can trust the system. | 13 |
|  | 15.As a system Administrator I want to enlist authenticated services  so that I can convey to authorities | 2 |
|  | 8.As a system Administrator I want to identify fake services  so that I can notify survival online tiffin service . | 5 | I3=20 | 3 |
|  | 9.As a system Administrator I want to access employee logins so that I can  verify employees | 13 |
|  | 12.As a system Administrator I want to retrieve treatment details  so that I can know available facilities | 2 |
|  | 3. As a system Administrator I want to centre registration number so that I can crosscheck with government details. | 8 | I4=19 | 4 |
|  | 6.As a system Administrator I want to corroborate data accuracy so that I can  evaluate efficiency. | 8 |
|  | 11.As a system Administrator I want to fetch amenities  so that I can to know available facilities | 3 |
|  | 10.As a system Administrator I want to track employee work  so that I can calculate employee experience | 3 | I5=19 | 5 |
|  | 13.As a system Administrator I want to notify fake services  so that I can send warning messages | 5 |
|  | 14.As a system Administrator I want to request proofs  so that I can validate available services | 8 |
|  | 16.As a system Administrator I want to display centre authentication  so that I can notify authenticated services | 3 |

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| **Objective-2** | **Launch Centre Controls** | **SP** | **IC** | **IP** |
| **Task Description** | 1.As a system Administrator I want to Access survival Centre database so that I can Avail all the details | 5 | I1=20 | 1 |
|  | 3.As a system Administrator I want to Assign employee controls  so that I can Restrict centre controls. | 13 |
|  | 4.As a system Administrator I want to Manage user privileges  so that I can Limit user controls. | 2 |
|  | 2. As a system Administrator I want to Define centre controls  so that I can Assign centre controls. | 8 | I2=20 | 2 |
|  | 7.As a system Administrator I want to Provide privacy policy  so that I can Assure client security. | 8 |
|  | 9.As a system Administrator I want to Maintain group profile  so that I can Announce notifications, privacy and permissions | 2 |
|  | 6.As a system Administrator I want to Present work timeline  so that I can View work list. | 2 |
|  | 5.As a system Administrator I want to Enable Administrator privileges  so that I can Have full control over online tiffin service account. | 8 | I3=20 | 3 |
|  | 8.As a system Administrator I want to Display dashboard  so that I can Access avail services. | 3 |
|  | 10.Attach support inbox As a system Administrator I want to  so that I can Save the messages. | 2 |
|  | 11.As a system Administrator I want to Define setting parameters  so that I can Create account settings. | 3 |
|  | 12.As a system Administrator I want to Enlist language support so that I can Provide language list | 2 |
|  | 13.As a system Administrator I want to Provide notification  so that I can Notify survival centres | 2 |
|  | 14.As a system Administrator I want to Render tracking service  so that I can Track the services. | 5 | I4=18 | 4 |
|  | 15.As a system Administrator I want to Enable migration service  so that I can Allow food migration. | 5 |
|  | 16.As a system Administrator I want to Permit limited database access  so that I can Be assured that information is transferred. | 8 |

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| **Process-1** | **Assign Centre Privileges** | **SP** | **IC** | **IP** |
|  | 1.As a Centre Administrator Iwant to Create Online tiffin service Role so that I can Assign privileges to each role differently | 5 | I1=20 | 1 |
|  | 2.As a Centre Administrator Iwant to Export account data  Backup emails data from entire accounts | 13 |
|  | 8.As a Centre Administrator Iwant to Manage User Accounts  so that I can Control all user accounts from control panel. | 2 |
|  | 2.As a Centre Administrator Iwant to Define Access restriction so that I can Limit online tiffin service privileges | 8 | I2=20 | 2 |
|  | 3.As a Centre Administrator Iwant to Enable Administrator Privileges  so that I can Empower Administrators with full control over centre account | 5 |
|  | 5.As a Centre Administrator Iwant to Set Roles and privileges  so that I can Allot varying levels of privileges to each user. | 5 |
|  | 14.As a Centre Administrator Iwant to Fetch facility details so that I can  Assign centre privileges | 2 |
|  | 6.As a Centre Administrator Iwant toMonitor Audit logsso that I can  Track food online tiffin service activities | 8 | I3=20 | 3 |
|  | 7.As a Centre Administrator Iwant to Provide Email Policies so that I can  Setup restriction on mailbox. | 5 |
|  | 9.As a Centre Administrator Iwant to Link User profile so that I can  Link user to the name authority | 5 |
|  | 15. As a Centre Administrator Iwant to Ask privileges report  Review the privileges. | 2 |
|  | 10.As a Centre Administrator Iwant to Notice unusual activity  Block malicious user account | 8 | I4=18 | 4 |
|  | 11.As a Centre Administrator Iwant to Provide Authorization so that I can  Grant permission to perform action on system resources | 5 |
|  | 16.As a Centre Administrator Iwant to Define new privileges  Reassign if necessary | 5 |
|  | 12As a Centre Administrator Iwant to Enable Access Control  Protect system resources from unauthorized access | 8 | I5=16 | 5 |
|  | 13.As a Centre Administrator Iwant to Avail User level permission  Set exclusive privileges on working object | 8 |

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| **Process-2** | **Release Centre Controls** | **SP** | **IC** | **IP** |
| **Task Description** | 1. As a system Administrator I want to Fetch Centres Database so that I can Prepare the data using the details | 5 | I1=20 | 1 |
|  | 6. As a system Administrator I want to check centres graph  so that I can cross-validate the graph of | 13 |
|  | 2. As a system Administrator I want to Detect Centre Facilities so that I can Manage centre facilities | 2 |
|  | 3. As a system Administrator I want to review centre work so that I can  rank them in order | 8 | I2=20 | 2 |
|  | 5. As a system Administrator I want to record centres’ statistic  so that I can gather this record and inform the unselected centres about it | 5 |
|  | 7. As a system Administrator I want to generate centre template  so that I can maintain uniformity regarding the format of the message | 5 |
|  | 4. As a system Administrator I want to formulate information graph so that I can  provide precise information | 2 |
|  | 8. As a system Administrator I want to notify centre report  so that I can approach the centres for the vacancies created | 5 | I3=20 | 3 |
|  | 9 As a system Administrator I want to. Examine centre facilities  so that I can derive errors if any. | 13 |
|  | 10. As a system Administrator I want to provide centre statistics  so that I can make it available for future use | 2 |
|  | 11. As a system Administrator I want to generate features graph  so that I can improve the graph | 5 | I4=18 | 4 |
|  | 13. As a system Administrator I want to evaluate different strategy so that I can choose appropriate strategy | 5 |
|  | 14. As a system Administrator I want to upload centre details  so that I can obtain centre privileges | 8 |
|  | 12. As a system Administrator I want to plot centre graph  so that I can create a understandable statistics | 3 | I5=16 | 5 |
|  | 15. As a system Administrator I want to access centre data  so that I can prioritize the services | 5 |
|  | 16 As a system Administrator I want to access centre controls  so that I can use centre privileges | 8 |

**User Stories Goal 2- Create Food Dictionary**

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| **Objective-1** | **Catalogue Foods** | **SP** | **IC** | **IP** |
| **Task Description** | 4. As a Centre Manager I want to Record intake location so that I can Save location details. | 13 | I1=20 | 1 |
|  | 6. As a Centre Manager I want to Set Catalogue Parameter so that I can Organize food details | 5 |
|  | 2. As a Centre Manager I want to Ascertain food species so that I can Categorize the foods. | 2 |
|  | 8. As a Centre Manager I want to Browse food feature so that I can Match with existing data | 13 | I2=20 | 2 |
|  | 10. As a Centre Manager I want to Decide attribute ranges so that I can Compare abnormalities of data | 5 |
|  | 15. As a Centre Manager I want to Catalogue Foods so that I can Use while reporting food | 2 |
|  | 13. As a Centre Manager I want to Produce the correct data so that I can Resolve the abnormality issue | 13 | I3=18 | 5 |
|  | 14. As a Centre Manager I want to Correct found abnormality so that I can Refine the data | 5 |
|  | 11. As a Centre Manager I want to Inspect catalogue database so that I can Sieve abnormalities | 8 | I4=19 | 3 |
|  | 5. As a Centre Manager I want to Record Food Details so that I can Store into database | 8 |
|  | 1. As a Centre Manager I want to Observe food living condition so that I can Determine whether food is missing, pet or roadside. | 3 |
|  | 12. As a Centre Manager I want to Search for inadequate data so that I can Identify missing and null data | 8 | I5=19 | 4 |
|  | 16. As a Centre Manager I want to Commit database changes so that I can Render the changes to the team | 8 |
|  | 3. As a Centre Manager I want to Determine breed type so that I can Find characteristics. | 3 |
|  | 7. As a Centre Manager I want to Take food photograph so that I can Identify food | 5 | I6=8 | 6 |
|  | 9. As a Centre Manager I want to Assert food breed so that I can Mention in the food catalogues | 3 |

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| **Process-1** | **Create Food portfolio** | **SP** | **IC** | **IP** |
| **Task Description** | 4. As a Centre Administrator I want to List breed characteristics so that I can Use for further actions. | 13 | I1=20 | 1 |
|  | 1. As a Centre Administrator I want to Observe food living condition so that I can Determine whether food is missing, pet or roadside. | 5 |
|  | 9. As a Centre Administrator I want to Verify food data so that I can ensure data correctness | 2 |
|  | 3. As a Centre Administrator I want to Determine breed type so that I can Find characteristics | 8 | I2=20 | 2 |
|  | 2. As a Centre Administrator I want to Ascertain food species so that I can Categorize the foods. | 5 |
|  | 5. As a Centre Administrator I want to Identify body marks so that I can Identify food uniqueness. | 3 |
|  | 10. As a Centre Administrator I want to Group attribute data so that I can Examine data distribution. | 1 |
|  | 8. As a Centre Administrator I want to Pre-process foods attribute details so that I can Analyse food behavioural changes | 8 | I3=20 | 3 |
|  | 12. As a Centre Administrator I want to Consolidate final data with features so that I can use it to train statistical models | 8 |
|  | 7. As a Centre Administrator I want to Identify all other attributes so that I can Use it for pre-processing | 3 |
|  | 14. As a Centre Administrator I want to Avoid duplication so that I can Remove data redundancy | 1 |
|  | 15. As a Centre Administrator I want to Create food portfolio so that I can Maintain food record | 8 | I4=19 | 4 |
|  | 16. As a Centre Administrator I want to Record into centre database so that I can Use it in future. | 8 |
|  | 13. As a Centre Administrator I want to Identify missing details so that I can Prevent data inconsistency. | 3 |
|  | 6. As a Centre Administrator I want to Recognize coat type so that I can Specify food precisely | 8 | I5=13 | 5 |
|  | 11. As a Centre Administrator I want to Retrieve owner details so that I can Notify owner future activities. | 5 |

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| **Process-2** | **Register Food Feature** | **SP** | **IC** | **IP** |
| **Task Description** | 7. As a Database Administrator I want to Record formulated observations so that I can discuss with the analysis team | 13 | I1=20 | 1 |
|  | 2. As a Database Administrator I want to Design patterns for attributes so that I can study the data | 5 |
|  | 3. As a Database Administrator I want to Conceptualise output parameters so that I can process of analysing is directed | 2 |
|  | 13. As a Database Administrator I want to Group and compare attributes so that I can examine data distribution | 13 | I2=20 | 2 |
|  | 4. As a Database Administrator I want to Prioritise the important parameters so that I can produce accurate results | 5 |
|  | 6. As a Database Administrator I want to Organise the parameters so that I can simplify analysis process | 2 |
|  | 1. As a Database Administrator I want to Organise food database attributes so that I can easily analyse the data | 8 | I3=20 | 3 |
|  | 8. As a Database Administrator I want to Correspond with Analysis team so that I can refine the observations | 5 |
|  | 15. As a Database Administrator I want to Consolidate outline of analysis process so that I can systemize procedure | 5 |
|  | 12. As a Database Administrator I want to Pre-process foods attribute details so that I can Analyse food behavioural changes | 2 |
|  | 5. As a Database Administrator I want to Map shortlisted attributes so that I can formalize the observations | 8 | I4=19 | 4 |
|  | 9. As a Database Administrator I want to Consolidate outline analysis process so that I can systemize procedure | 8 |
|  | 11. As a Database Administrator I want to Compare attributes between foods so that I can Decide what attributes are important. | 3 |
|  | 10. As a Database Administrator I want to Corroborate consistency of selected attributes so that I can prevent problems affecting further process | 8 | I4=16 | 5 |
|  | 14. As a Database Administrator I want to Evaluate different feature selection strategies so that I can Filter food among all | 8 |
|  | 16. As a Database Administrator I want to Construct final analysis methodology so that I can begin development process | 8 | I6=13 | 6 |
|  | 17. As a Database Administrator I want to Register Food Features so that I can Use for further processing | 5 |

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| **Objective-2** | **Prepare Food Comfort Chart** | **SP** | **IC** | **IP** |
| **Task Description** | 8. As anCentre Manager I want to Know Food Welfare Assessment so that I canUnderstand physiologically, behaviourally growing needs | 13 | I1=20 | 1 |
|  | 2. As anCentre Manager I want to Filter food wise information so that I canCreate Count of food | 5 |
|  | 6. As anCentre Manager I want to Measure housing environment so that I canArrange services | 2 |
|  | 1. As anCentre Manager I want toRetrieve food data source so that I canHave food information | 8 | I2=20 | 2 |
|  | 14. As anCentre Manager I want to Inform the Authorities so that I canMake further process | 5 |
|  | 16. As anCentre Manager I want to Store details into database so that I canUse it in future | 5 |
|  | 10. As anCentre Manager I want to Give emotional support so that I canAssure Sustainability of food | 2 |
|  | 3. As anCentre Manager I want to Sort test results according to criteria so that I canUnderstand the Comfort zone of food | 8 | I3=19 | 3 |
|  | 4. As anCentre Manager I want to Know food type so that I canMake filter based on this | 8 |
|  | 5. As anCentre Manager I want to Know food available so that I canMaintain type of food | 3 |
|  | 7. As anCentre Manager I want to Score body condition & lameness so that I canPrepare health report | 8 | I4=19 | 4 |
|  | 9. As anCentre Manager I want to Identify Nutritional changes so that I canAnalysis the behaviour. | 8 |
|  | 11. As anCentre Manager I want to Find Behavioural expectation so that I canExpect the reaction. | 3 |
|  | 12. As anCentre Manager I want to Ascertain Species so that I canAdd data to the chart | 3 | I5=19 | 5 |
|  | 13. As anCentre Manager I want to Secure Location Access so that I canKeep food safe. | 8 |
|  | 15. As anCentre Manager I want to Confirm food data so that I canStore into database | 8 |

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| **Process-1** | **Gather Living Conditions** | **SP** | **IC** | **IP** |
| **Task Description** | 4. As a Caretaker I want to Assess Food welfare conditions so that I canAdd data to the chart | 13 | I1=20 | 1 |
|  | 1. As a Caretaker I want to Know the type of food so that I canMake filter based on this | 5 |
|  | 6. As a Caretaker I want to Find Behavioural expectation so that I canExpect behavioural changes. | 2 |
|  | 16. As a Caretaker I want to Improve living condition Result so that I canTo make improvement in the system | 13 | I2=20 | 2 |
|  | 8. As a Caretaker I want to Corroborate selected attributes consistency so that I canprevent problems affecting further process | 5 |
|  | 7. As a Caretaker I want to List available foods attributes so that I canchoose attributes to be considered | 2 |
|  | 3. As a Caretaker I want to Gather environmental body effects so that I canAvoid that exposure | 8 | I3=20 | 3 |
|  | 9. As a Caretaker I want to Compare attributes between foods so that I canDecide what attributes are important | 8 |
|  | 2. As a Caretaker I want to Assess surrounding environment so that I canKnow Environmental differences | 3 |
|  | 5. As a Caretaker I want to Detect emotional characteristics so that I canGive emotional support | 1 |
|  | 13. As a Caretaker I want to Filter Different living condition so that I canMaintain the domain in the strategies | 8 | I4=19 | 5 |
|  | 15. As a Caretaker I want to Integrate results so that I canIntegrate results for the betterment of living condition | 8 |
|  | 10. As a Caretaker I want to Pre-process foods attribute details so that I canAnalyse food behavioural changes | 3 |
|  | 11. As a Caretaker I want to Use different feature selection strategies so that I canCategorize the foods based on features. | 5 | I5=20 | 4 |
|  | 12. As a Caretaker I want to Acquire living condition Difficulty so that I canCreate questionnaires about living condition | 5 |
|  | 14. As a Caretaker I want to Store Food Results so that I canAccess them in further living condition | 5 |
|  | 17. As a Caretaker I want to Store Details into database so that I canUse later stage | 5 |

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| **Process-2** | **Register Continental Details** | **SP** | **IC** | **IP** |
| **Task Description** | 17. As a Online tiffin service Manager I want to Register Continental details so that I canUse into food registration | 13 | I1=20 | 1 |
|  | 1. As a Online tiffin service Manager I want to Set mandatory field so that I canmaintain consistency of database | 5 |
|  | 16. As a Online tiffin service Manager I want to Discuss Food Analysis so that I canEnsure system correctness | 2 |
|  | 5. As a Online tiffin service Manager I want to Register continental details into database so that I canstore new continental details | 8 | I2=20 | 2 |
|  | 9. As a Online tiffin service Manager I want to Promote Database structure so that I canaccommodate details in continental details | 8 |
|  | 2. As a Online tiffin service Manager I want to Ascertain Continental details so that I canmake system as accurate as possible | 3 |
|  | 3. As a Online tiffin service Manager I want to Set fields detail so that I canadd Continental details | 1 |
|  | 11. As a Online tiffin service Manager I want to Get continents curate list so that I canCompare available foods | 8 | I3=19 | 4 |
|  | 13. As a Online tiffin service Manager I want to Provide Precise information so that I canGive Information about the foods | 8 |
|  | 14. As a Online tiffin service Manager I want to Validate information so that I canStore data efficiently in database | 3 |
|  | 4. As a Online tiffin service Manager I want to Accept Continental details inputs so that I canStore new continental details | 5 | I4=20 | 3 |
|  | 8. As a Online tiffin service Manager I want to Decide appropriate sorting for database so that I cancreate a relative rating index | 5 |
|  | 10. As a Online tiffin service Manager I want to Create log file so that I cankeep track of changes made | 5 |
|  | 12. As a Online tiffin service Manager I want to Ensure adequate foods availability so that I canQuickly complete survey. | 5 |
|  | 6. As a Online tiffin service Manager I want to Set limits and bounds in database so that I cankeep the data relative and realistic | 3 | I5=9 | 5 |
|  | 7. As a Online tiffin service Manager I want to Evoke continental details so that I cancompare continents | 3 |
|  | 15. As a Online tiffin service Manager I want to Record Formulated Observations so that I candiscuss with the analysis team | 3 |

**3. USER STORIES: GOAL 3– Capture Food Status**

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| **Objective-1** | **Classify food status** | **SP** | **IC** | **IP** |
|  | 1.As a Caretaker I want to Organize food Portfolio so that I can Study and Observe food status and behaviour. | 5 | I1=20 | 1 |
|  | 4.As a Caretaker I want to Validate food Information  So that I can Provide reliable information to the caretaker team | 13 |
|  | 2.As a Caretaker I want to Access survival centre database  So that I can Retrieve Food Information about various aspects. | 2 |
|  | 3.As a Caretaker I want to Access Food Comfort Chart so that I can  Use the relative information for further analysis. | 5 | I2=20 | 2 |
|  | 5.As a Caretaker I want to Maintain Record Changes so that I can  Keep track of every action done by the system | 8 |
|  | 6.As a Caretaker I want to Create status categories  So that I can Categorize the status. | 2 |
|  | 7.As a Caretaker I want to Study food status carefully  So that I can Classify the food status | 5 | I3=20 | 3 |
|  | 9.As a Caretaker I want to Feed the database  So that I can Access it in future. | 8 |
|  | 10.As a Caretaker I want to Observe Food Behaviour  So that I can Note down the characteristics. | 5 |
|  | 11.As a Caretaker I want to Note down behavioural changes  So that I can Expect the food behaviour. | 2 |
|  | 8.As a Caretaker I want to Create food status chart  So that I can Use it for further process. | 5 | I4=18 | 4 |
|  | 12.As a Caretaker I want to Categorize food status  So that I can Classify foods | 8 |
|  | 13.As a Caretaker I want to Communicate the users  So that I can Convey them the food status | 5 |
|  | 14.As a Caretaker I want to Arrange Online tiffin service meeting  So that I can Discuss further process. | 8 | I5=18 | 5 |
|  | 15.As a Caretaker I want to Derive status report  So that I can Provide to the users. | 5 |
|  | 16.As a Caretaker I want to Correspond with analysis team  So that I can Convey the changes. | 5 |

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| **Process-1** | **Certify food status** |  |  |  |
|  | 1.As a caretaker I want to Access food database so that I can Get food status information | 5 | I1=20 |  |
|  | 12.As a caretaker I want to Certify food status  So that I can Provide documented Proof. | 13 | 1 |
|  | 4.As a caretaker I want to Identify the changes so that I can  Make changes in the database. | 2 |
|  | 2.As a caretaker I want to Get food status chart so that I can Study food status | 5 | I2=20 | 2 |
|  | 3.As a caretaker I want to Reorganize food portfolio  So that I can Update the data | 8 |
|  | 9.As a caretaker I want to Verify food status  So that I can Confirm the status | 2 |
|  | 5.As a caretaker I want to Register status features  So that I can Use it for further actions. | 8 | I3=20 | 3 |
|  | 7.As a caretaker I want to Remove inconsistent data  So that I can Make consistent database. | 8 |
|  | 15.As a caretaker I want to Provide Status Report  So that I can Ensure whether user are satisfied with caretaker activities | 3 |
|  | 16.As a caretaker I want to Save Report Details  So that I can Use it for further process | 1 |
|  | 6.As a caretaker I want to Study status characteristics  So that I can Observe the changes. | 5 | I4=18 | 4 |
|  | 8.As a caretaker I want to Create log File  So that I can Record saved data. | 5 |
|  | 10.As a caretaker I want to Reregister food status  So that I can Use updated data. | 8 |
|  | 11.As a caretaker I want to Inform all the authorities  So that I can Process further actions. | 8 | I5=15 | 5 |
|  | 13.As a caretaker I want to Inform the respected user  So that I can Get user acknowledgement. | 5 |
|  | 14.As a caretaker I want to Enlist certified foods  So that I can Add to the database | 2 |

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| **Process-2** | **Register food status** | **SP** | **IC** | **IP** |
|  | 1.As an System administrator I want to Retrieve Food online tiffin service database so that I can  Access food information | 5 | I1=20 | 1 |
|  | 2.As an System administrator I want to Get food Centre Profiles  So that I can Utilize more information | 13 |
|  | 3.As an System administrator I want to Study food status chart  So that I can observe the characteristics | 2 |
|  | 4.As an System administrator I want to Get categorized status  So that I can Determine status registration options | 8 | I2=20 | 2 |
|  | 9.As an System administrator I want to Group and compare attributes  So that I can examine data distribution | 8 |
|  | 7.As an System administrator I want to Draw a map for the shortlisted attributes  So that I can formalize the observations | 2 |
|  | 12.As an System administrator I want to Register food status  So that I can Convey the user | 2 |
|  | 5.As an System administrator I want to Contact system analyst  So that I can Get analysed data | 5 | I3=20 | 3 |
|  | 6.As an System administrator I want to Study analysed data  So that I can Compare the status | 5 |
|  | 10.As an System administrator I want to Consult with authorities  So that I can Consider food registration. | 8 |
|  | 14.As an System administrator I want to See If Space is available  So that I can Register new foods | 2 |
|  | 8.As an System administrator I want to Pre-process foods attribute details  So that I can Analyse food behavioural changes | 5 | I4=18 | 4 |
|  | 11.As an System administrator I want to Verify consistency of selected attributes  So that I can prevent problems affecting further process | 8 |
|  | 13.As an System administrator I want to Reorganize status details  So that I can Add to database | 5 |
|  | 15.As an System administrator I want to Validate Food data  So that I can Ensure process Correctness. | 5 | I5=13 | 5 |
|  | 16.As an System administrator I want to Search for additional data  So that I can Add the details. | 8 |

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| **Objective-2** | **Diagnose Food Health** | **SP** | **IC** | **IP** |
|  | 1.As a Food tech I want to Fetch food data so that I can  Study food data. | 5 | I1=20 | 1 |
|  | 6.As a Food tech I want to Give inspection appointments  So that I can Prioterize the work easily | 13 |
|  | 2.As a Food tech I want to Access food status chart  So that I can Study carefully food status | 2 |
|  | 3.As a Food tech I want to Build Queries template  So that I can Prepare sequence chart. | 8 | I2=20 | 2 |
|  | 5.As a Food tech I want to Access food comfort chart  So that I can Study their weak points. | 8 |
|  | 12.As a Food tech I want to Maintain Record Changes  So that I can Keep track of every action done by the system | 2 |
|  | 13.As a Food tech I want to Present food data  So that I can Make arrangement of required treatment | 2 |
|  | 4.As a Food tech I want to Categorize food health severity so that I can Prioritize the food inspection sequence | 5 | I3=18 | 3 |
|  | 10.As a Food tech I want to Suggest necessary treatment  So that I can Diagnose next food. | 13 |
|  | 7.As a Food tech I want to Diagnose food Carefully  So that I can Give treatment successfully. | 13 | I4=18 | 4 |
|  | 8.As a Food tech I want to Make note of points  So that I can Use it for further actions. | 5 |
|  | 9.As a Food tech I want to Discuss with other veterinaries So that I can Confirm the treatment. | 5 | I5=18 | 5 |
|  | 11.As a Food tech I want to Inspect Food injury severity  So that I can Suggest surgery treatment. | 8 |
|  | 14.As a Food tech I want to Find root cause of disease  So that I can Avoid future happening. | 5 |
|  | 15.As a Food tech I want to Schedule the work  So that I can Complete in time. | 8 | I6=16 | 6 |
|  | 16.As a Food tech I want to Diagnose all the foods  So that I can Prepare a data chart. | 8 |

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| **Process-1** | **Identify Food Symptoms** | **SP** | **IC** | **IP** |
| **Task Description** | 1.As a food tech Doctor I want toDiagnose food health so that I can  Identify food symptoms. | 5 | I1=20 | 1 |
|  | 3.As a food tech Doctor I want toValidate food Information  So that I can Take Further Actions. | 13 |
|  | 15.As a food tech Doctor I want toProvide Data Format  So that I can Maintain a proper format for dates. | 2 |
|  | 2.As a food tech Doctor I want toAccess food database so that I can  Study relevant information. | 8 | I2=19 | 2 |
|  | 4.As a food tech Doctor I want toEliminate Irrelevant Information  So that I can Avoid confusion | 8 |
|  | 16.As a food tech Doctor I want toPromote food database  So that I can Use it for further processing. | 3 |
|  | 5.As a food tech Doctor I want toStudy food Injuries  So that I can Note down Food symptoms. | 5 | I3=20 | 3 |
|  | 6.As a food tech Doctor I want toObserve food Symptoms  So that I can Derive the injury type. | 13 |
|  | 12.As a food tech Doctor I want toCreate report File  So that I can Maintain record of symptoms. | 2 |
|  | 7.As a food tech Doctor I want toDetermine injury or symptoms severity  So that I can Take some more test | 8 | I4=18 | 4 |
|  | 11.As a food tech Doctor I want toConvey the user about status  So that I can Process further actions. | 5 |
|  | 14.As a food tech Doctor I want toClear diagnosed food  So that I can Study another food. | 5 |
|  | 8.As a food tech Doctor I want toTake some medical test  So that I can Clear the assumptions. | 13 | I5=18 | 5 |
|  | 9.As a food tech Doctor I want toDemand test report  So that I can Study the report | 5 |
|  | 10.As a food tech Doctor I want toVerify Test report  So that I can Convey to the authorities. | 8 | I6=18 | 6 |
|  | 13.As a food tech Doctor I want toAccess Survival Centre Details  So that I can Suggest best fit centre. | 5 |

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| **Process-2** | **Generate Health Report** | **SP** | **IC** | **IP** |
| **Task Description** | 1As an Employee I want to Access food database so that I can  Extract important information. | 5 | I1=20 | 1 |
|  | 3.As an Employee I want to Communicate with Food tech so that I can  Get help in report making. | 13 |
|  | 9.As an Employee I want to Categorize the food details  So that I can Make proper format. | 2 |
|  | 2.As an Employee I want to Retrieve food Status chart so that I can Use it for report making. | 8 | I2=20 | 2 |
|  | 4.As an Employee I want to Extract all the food files so that I can Get all the relevant information. | 5 |
|  | 7.As an Employee I want to Communicate with caretaker so that I can  Discuss food behaviour. | 5 |
|  | 11.As an Employee I want to Add various elements to the report so that I can generate a thorough detail. | 2 |
|  | 6.As an Employee I want to Verify data in the database so that I can  Authenticate the data. | 13 | I3=20 | 3 |
|  | 13.As an Employee I want to Add report to food files. So that I can  Show it whenever requested. | 2 |
|  | 14.As an Employee I want to Register food as diagnosed  So that I can Process further reports. | 5 |
|  | 5.As an Employee I want to Study Previously generated reports so that I can  Use the data in final report | 8 | I3=19 | 4 |
|  | 8.As an Employee I want to Contact with doctor so that I can  Know the report well. | 8 |
|  | 10.As an Employee I want to Get the various test report  So that I can Generate a final report. | 3 |
|  | 15.As an Employee I want to Study Health report  So that I can Recommend survival centre. | 13 | I5=18 | 5 |
|  | 16.As an Employee I want to Categorize health reports  So that I can Measure the serious issues. | 5 |
|  | 12.As an Employee I want to Confirm Final Report  So that I can Convey the End user or food Owner. | 8 | I6=8 | 6 |

# 4.USER STORIES: GOAL 4- Assign Caretaker Services

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| **Objective-1** | **Search Nearby Survival Centre** | **SP** | **IC** | **IP** |
| **Task Description** | 7.As a Caretaker I want toRecord user Queries so that I canEach queries must be recorded in database | 13 | I1=20 | 1 |
|  | 9.As a Caretaker I want toBuild Queries template so that I canMake a template for sending the information to developer | 5 |
|  | 3.As a Caretaker I want toRequest facilitator so that I cantour the fitness centre | 2 |
|  | 1.As a Caretaker I want toRetrieve Online tiffin service Database so that I canAccumulate all the information regarding Online tiffin service | 8 | I2=20 | 2 |
|  | 6.As a Caretaker I want toProvide Precise information so that I canGive Information about the user queries | 8 |
|  | 2.As a Caretaker I want toTake online tiffin service tour so that I canobserve the online tiffin service facilities. | 3 |
|  | 4.As a Caretaker I want toExamine Online tiffin service facilities so that I canUnderstand the quality of the online tiffin service . | 1 |
|  | 8.As a Caretaker I want toInform Queries Result so that I canProvide information about the user queries to developer | 8 | I3=20 | 3 |
|  | 10.As a Caretaker I want toNotify unselected Queries so that I canDiscard the unnecessary problems | 8 |
|  | 5.As a Caretaker I want toensure machine availability so that I canidentify available treatments. | 3 |
|  | 15.As a Caretaker I want toAvoid Space Wastage so that I canRemove the unnecessary information | 1 |
|  | 12.As a Caretaker I want toMake Future availability so that I canMake it available for future use | 8 | I4=20 | 4 |
|  | 11.As a Caretaker I want toFinalize Queries Content so that I canProvide the Developer with the queries statistics | 5 |
|  | 16.As a Caretaker I want toPromote Query Graph so that I canUpdate the query form according to feedback | 5 |
|  | 14.As a Caretaker I want toEvaluate Feature Selection so that I canChoose appropriate strategy for queries | 2 |
|  | 13.As a Caretaker I want toProvide Cross-validation so that I canProvide a correct required details | 3 | I5=3 | 5 |

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| **Process-1** | **Gather Centre Information** | **SP** | **IC** | **IP** |
| **Task Description** | 1.As a Centre Manager I want toTrace User Location so that I canIdentify where user is | 13 | I1=20 | 1 |
|  | 3.As a Centre Manager I want toValidate User Location so that I canIdentify the authenticity of user location | 5 |
|  | 7.As a Centre Manager I want toInspect User Location so that I canAnalyse its importance | 2 |
|  | 18.As a Centre Manager I want toCluster Centre Information so that I canUser can access best nearby food online tiffin service | 13 | I2=20 | 2 |
|  | 5.As a Centre Manager I want toPromote User Location so that I canKeep my database update regarding user location | 5 |
|  | 13.As a Centre Manager I want toDiscover Online tiffin service so that I canMake system as accurate as possible | 2 |
|  | 2.As a Centre Manager I want toCorroborate User Location so that I canSee that user location is correct | 8 | I3=19 | 4 |
|  | 4.As a Centre Manager I want toIdentify Nearby Places so that I canLocate the user easily | 8 |
|  | 6.As a Centre Manager I want toHoard User Location so that I canUse it for future use | 3 |
|  | 8.As a Centre Manager I want toDetermine User Location so that I canSend emergency alerts whenever user is trapped in dangerous situations | 5 | I4=20 | 3 |
|  | 11.As a Centre Manager I want toFetch Online tiffin service Database so that I canAccumulate all the information regarding queries | ­5 |
|  | 14.As a Centre Manager I want toSet details fields in database so that I canAdd food online tiffin service details | 5 |
|  | 17.As a Centre Manager I want toDecide appropriate database sort so that I canCreate a relative rating index | 5 |
|  | 9.As a Centre Manager I want toCross Validate User Location so that I canKnow the exact and correct user location | 8 | I5=19 | 5 |
|  | 10.As a Centre Manager I want toConserve User Location so that I canSend emergency alerts to online tiffin service | 8 |
|  | 12.As a Centre Manager I want toFilter Query Result so that I canClassify User according to interest | 3 |
|  | 15.As a Centre Manager I want toAccept Online tiffin service Profile Inputs so that I canAdd new food online tiffin service s profile | 8 | I6=11 | 6 |
|  | 16.As a Centre Manager I want toInhabit Online tiffin service details so that I canCompare food online tiffin service s as per Services | 3 |

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| **Process-2** | **Obtain Employee Information** | **SP** | **IC** | **IP** |
| **Task Description** | 3.As anCentre Manager I want toEnsure data correctness so that I canCheck employee data | 13 | I1=20 | 1 |
|  | 2.As anCentre Manager I want toAccumulate Employee Data so that I canExtract the data | 5 |
|  | 4.As anCentre Manager I want toExtract Useful Information so that I canProcess it for further changes | 2 |
|  | 9.As anCentre Manager I want toProcess Feedback Details so that I canEnsure the employee performance | 13 | I2=20 | 2 |
|  | 7.As anCentre Manager I want toDisplay Employee Experience so that I canAssure user about employees growth | 5 |
|  | 16As anCentre Manager I want toCreate Statistical report so that I canProvide it to users | 2 |
|  | 1.As anCentre Manager I want toObtain Food Online tiffin service Details so that I canObtain employee information | 8 | I3=19 | 3 |
|  | 8.As anCentre Manager I want toAccess Feedback about Employee so that I cancheck the users feedback | 8 |
|  | 5.As anCentre Manager I want toArrange Meeting Schedules so that I canReport employee activities to users | 3 |
|  | 10.As anCentre Manager I want toMake System Secure so that I canAvoid hampering of the result of candidates in the online test | 8 | I4=19 | 4 |
|  | 12.As anCentre Manager I want toSort Employee so that I canEasily obtain the details of the selected employee | 8 |
|  | 13.As anCentre Manager I want toPreserve Interested Field so that I canConvey the selected employees individually to the services | 3 |
|  | 15.As anCentre Manager I want toOrganize Data System so that I canAccess the information of employees easily | 8 | I5=18 | 5 |
|  | 11.As anCentre Manager I want toObtain Employee Achievements so that I canModify the database according to the result | 5 |
|  | 18.I want toGet Expert Details so that I canDemonstrate the results | 5 |
|  | 6.As anCentre Manager I want toExtract Employee Data so that I canAchieve the speed of retrieval | 3 | I6=9 | 6 |
|  | 14.As anCentre Manager I want toEvaluate Employees Ability so that I canEvaluate the Employees critical ability | 3 |
|  | 17.As anCentre Manager I want toKnow if changes are to be made so that I canKeep the system updated | 3 |

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| **Objective-2** | **Assign Caretaker** | **SP** | **IC** | **IP** |
| **Task Description** | 3.As a Centre Manager I want toExtract caretaker information so that I canUse it for the assigning of caretaker | 13 | I1=20 | 1 |
|  | 1.As a Centre Manager I want toAdd large number of employee so that I canMake employee assignment easier | 5 |
|  | 12.As a Centre Manager I want toMake a precise database so that I canUse it to display to users | 2 |
|  | 10.As a Centre Manager I want tofind services provided by caretaker so that I canAssign caretaker. | 13 | I2=20 | 2 |
|  | 4.As a Centre Manager I want toInvestigate searched abnormality so that I canVerify the legitimacy | 5 |
|  | 16.As a Centre Manager I want toKnow the data sources so that I canTrust the system | 2 |
|  | 2.As a Centre Manager I want toConserve caretaker in database so that I canEasily find the caretaker as per online tiffin service | 8 | I3=20 | 3 |
|  | 6.As a Centre Manager I want toCorrect the found abnormality so that I canRefine the data | 8 |
|  | 8.As a Centre Manager I want toCheck already used data so that I canRollback the incorrect data operations | 3 |
|  | 13.As a Centre Manager I want toTrack validation process so that I canVerify data | 1 |
|  | 7.As a Centre Manager I want toCommit changes on database so that I canRender the changes to the team | 8 | I4=19 | 4 |
|  | 9.As a Centre Manager I want toNotify team about changes so that I canEnsure consistency in the system | 8 |
|  | 14.As a Centre Manager I want toRun background checks so that I canAscertain data correctness. | 3 |
|  | 17.As a Centre Manager I want toEstablish Caretaker background so that I canExpect transparency | 8 | I5=19 | 5 |
|  | 20.As a Centre Manager I want toAssign Caretaker so that I canAccess best possible services. | 8 |
|  | 19.As a Centre Manager I want toSurvey market values so that I canNegotiate new contracts and transfer fees. | 3 |
|  | 5.As a Centre Manager I want toProduce the correct, improvised data so that I canResolve the abnormality issue | 5 | I6=18 | 6 |
|  | 11.As a Centre Manager I want toGet correct caretaker prediction so that I canTo recommend caretaker to user | 5 |
|  | 18.As a Centre Manager I want toCreate error free Caretaker profile so that I canuse it in future | 5 |
|  | 15.As a Centre Manager I want toEnsure Caretaker Information so that I canProtect Caretaker data that I represent | 3 |

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| **Process-1** | **Confirm Food Status** | **SP** | **IC** | **IP** |
| **Task Description** | 15.As a Caretaker I want toCreate Food Status Report so that I canCommunicate with User | 13 | I1=20 | 1 |
|  | 1.As a Caretaker I want toAccess Current food status so that I canMake plan accordingly | 5 |
|  | 4.As a Caretaker I want toEliminate Irrelevant Information so that I canAvoid confusion | 2 |
|  | 6.As a Caretaker I want toConserve Record Changes so that I canKeep track of every action done by the system | 8 | I2=20 | 2 |
|  | 9.As a Caretaker I want toUpload Users Documents so that I canNotify food status | 8 |
|  | 2.As a Caretaker I want toCheck ambulance service required so that I canArrangement of ambulance | 3 |
|  | 3.As a Caretaker I want toValidate food Information so that I canProvide reliable information to the caretaker team | 1 |
|  | 13.As a Caretaker I want toList out required treatment so that I canCheck availability of treatment | 8 | I3=20 | 3 |
|  | 14.As a Caretaker I want toFind root cause of disease so that I canAvoid future disease | 8 |
|  | 8.As a Caretaker I want toPresent food data so that I canMake arrangement of required treatment | 3 |
|  | 7.As a Caretaker I want toCreate log file so that I canStore the changes made in the system | 1 |
|  | 5.As a Caretaker I want toInform ambulance so that I canCall ambulance to user location | 5 | I4=20 | 4 |
|  | 10.As a Caretaker I want toProvide Data Format so that I canMaintain a proper format for dates | 5 |
|  | 12.As a Caretaker I want toDiagnose Food so that I canIdentify required treatment | 5 |
|  | 16.As a Caretaker I want toModify food status Maintain co-ordination between Survival Online tiffin service and Caretaker | 5 |
|  | 11.As a Caretaker I want toCategorize Food Details so that I canCategorize Food according to type | 2 | I5=2 | 5 |

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| **Process-2** | **Provide Proper Treatment** | **SP** | **IC** | **IP** |
| **Task Description** | 8.As a Food tech I want toAssign experienced caretakerso that I canProvide best possible service | 13 | I1=20 | 1 |
|  | 1.As a Food tech I want toRequest Report Creationso that I canSo that it can be used for analysis of food | 5 |
|  | 5.As a Food tech I want toInspect food as per status reportso that I canDetect disease | 2 |
|  | 11.As a Food tech I want toProvide treatmentso that I canSave foods | 13 | I2=20 | 2 |
|  | 6.As a Food tech I want toDetect diseases so that I canAlert facilitator about treatment | 5 |
|  | 3.As a Food tech I want toStore Food Detailsso that I canUse for further analysis | 2 |
|  | 2.As a Food tech I want toFind food Status Reportso that I canBuild a food status Report | 8 | I3=20 | 3 |
|  | 4.As a Food tech I want toRequest facilitators permissionso that I canStart treatment | 8 |
|  | 13.As a Food tech I want toRefine Report changesso that I canEasily process data | 3 |
|  | 15.As a Food tech I want toArrange Meeting so that I canFinalize food health condition | 1 |
|  | 7.As a Food tech I want toAccess treatment data sourceso that I canFilter previous treatments | 8 | I4=16 | 4 |
|  | 9.As a Food tech I want toStudy Dieses so that I canProvide accurate treatment | 8 |
|  | 10.As a Food tech I want toCheck previous similar casesso that I canEasy to recommend best possible medicines | 8 | I5=16 | 5 |
|  | 14.As a Food tech I want toRenovate Food Statusso that I canIdentify food condition | 8 |
|  | 12.As a Food tech I want toRoutine Check upso that I canTrack food Treatment is on right direction | 5 | I6=16 | 6 |
|  | 16.I want toNotify userso that I canNotify user about on-going treatment | 5 |

**5. USER STORIES: GOAL 5**

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| **Objective-1** | **Explore The database** | **SP** | **IC** | **IP** |
|  | 1.As an Database administrator I want to Log in into the Food Survival Care so that I can  Get Information about Survival Centres | 5 | I1=20 | 1 |
|  | 4.As an Database administrator I want to Define food database attributes so that I can easily analyse the data | 13 |
|  | 13.As an Database administrator I want to Enter Database Details so that I can use for further process. | 2 |
|  | 2.As an Database administrator I want to Access Main Database so that I can Study the database. | 8 | I2=20 | 2 |
|  | 3.As an Database administrator I want to Identify database parameters so that I can Organize parameters data | 5 |
|  | 14.As an Database administrator I want to Create log file  So that I can Maintain record changes | 2 |
|  | 5. As an Database administrator I want to Retrieve food Data so that I can Observe main features. | 5 |
|  | 7. As an Database administrator I want to Check Centre database so that I can See facility details | 8 | I3=19 | 3 |
|  | 8. As an Database administrator I want to Examine Centre Profile so that I can Crosscheck the Data | 8 |
|  | 15. As an Database administrator I want to Do some data operations so that I can Ensure system Working | 3 |
|  | 6. As an Database administrator I want to Get User Queries  So that I can Solve User Queries | 13 | I4=18 | 4 |
|  | 9. As an Database administrator I want to Organize centre Profiles so that I can Arrange data in order | 5 |
|  | 10. As an Database administrator I want to Avail Centre Services so that I can Create Service File. | 5 | I5=18 | 5 |
|  | 11. As an Database administrator I want to Manage database security so that I can Ensure data protection. | 13 |
|  | 12. As an Database administrator I want to Manage resources allocation so that I can Allocate resources to the users. | 13 | I6=18 | 6 |
|  | 16. As an Database administrator I want to Detect data anomaly so that I can Remove the anomaly. | 5 |
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| **Process-1** | **Fetch Nearby Centre** | **SP** | **IC** | **IP** |
|  | 1.As a System Administrator I want to Retrieve Online tiffin service Database so that I can  Collect all the information regarding Online tiffin service | 5 | I1=20 | 1 |
|  | 5. As a System AdministratorI want to Ensure the availability of machines so that I can Identify available treatments. | 13 |
|  | 3.As a System AdministratorI want to Request the facilitator  So that I can tour the Survival centre | 2 |
|  | 2.As a System AdministratorI want to Take a tour of the online tiffin service so that I can Observe the online tiffin service facilities | 5 | I2=20 | 2 |
|  | 4.As a System AdministratorI want to Examine the Online tiffin service facilities so that I can Understand the quality of the online tiffin service | 8 |
|  | 6.As a System AdministratorI want to Search availability Of resources so that I can Allocate the resources. | 5 |
|  | 16.As a System AdministratorI want to Promote Centre Database. So that I can Use It For further actions. | 2 |
|  | 8.As a System AdministratorI want to Check Online tiffin service Spacing so that I can Confirm the details | 2 | I3=20 | 3 |
|  | 9.As a System AdministratorI want to Inspect Sanitation Process so that I can Detect any carelessness | 18 |
|  | 7.As a System AdministratorI want to Inquire About food shelter so that I can Verify the shelter existence | 8 | I4=18 | 4 |
|  | 11.As a System AdministratorI want to Enlist Available Centre  So that I can Suggest the centre | 5 |
|  | 12.As a System AdministratorI want to Search survival centre background so that I can Study the background. | 5 |
|  | 10.As a System AdministratorI want to Acquire User interests  So that I can Match the details | 13 | I5=18 | 5 |
|  | 14.As a System AdministratorI want to Evaluate Centre past work so that I can Rank them in order. | 5 |
|  | 13.As a System AdministratorI want to Inquire Future Availability so that I can Take future appointments. | 13 |
|  | 15.As a System AdministratorI want to Communicate with user so that I can Convey survival Centre details. | 5 |

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| **Process-2** | **Accumulate Centre Details** | **SP** | **IC** | **IP** |
|  | 1.As a system admin I want to Fetch food Survival Care database. So that I can get Centre details. | 5 | I1=20 | 1 |
|  | 3.As a system admin I want to Take a tour of centre  So that I can Observe the centre facilities. | 13 |
|  | 12.As a system admin I want to Enter all the data to database  So that I can Promote the database. | 2 |
|  | 2.As a system admin I want to Verify data sources  So that I can Authenticate centre details | 8 | I2=20 | 2 |
|  | 5.As a system admin I want to Enlist centre facilities  So that I can Categorize the facilities. | 5 |
|  | 13.As a system admin I want to Remove unnecessary data  So that I can Make database consistent. | 2 |
|  | 8.As a system admin I want to Acquire Nutrition Details  So that I can Study the details | 5 |
|  | 4As a system admin I want to Evaluate machine Efficiency  So that I can Confirm machine correctness | 18 | I3=20 | 3 |
|  | 14.As a system admin I want to Accommodate all the details  So that I can Use it For Further Process. | 2 |
|  | 7.As a system admin I want to Search Additional facilities  So that I can Add facility details | 13 | I4=18 | 4 |
|  | 10.As a system admin I want to Inquire about emergency servicesSo that I can Make a list of them. | 5 |
|  | 6.As a system admin I want to Enter facility details  So that I can Promote the database. | 8 | I5=16 | 5 |
|  | 9.As a system admin I want to Investigate vaccination ProcessSo that I can Verify from Experts | 8 |
|  | 11.As a system admin I want to Observe Caretaker relationshipsSo that I can Make a note of it. | 8 | I6=13 | 6 |
|  | 16.As a system admin I want to Compare Centre work success rate So that I can Rank them in Order | 5 |

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| **Objective-2** | **Analyse Health Report** | **SP** | **IC** | **IP** |
|  | 1.As an employee I want to Fetch Food Data  So that I can Collect all the information regarding queries | 8 | I1=20 | 1 |
|  | 2.As an employee I want to Access Final Report so that I can Study the report | 5 |
|  | 5.As an employee I want to Organise a meeting so that I can Present the data | 5 |
|  | 7.As an employee I want to Observe treatment flow  So that I can Determine needed resources | 2 |
|  | 11.As an employee I want to Check centre availability  So that I can Enlist available centres | 5 | I2=20 | 2 |
|  | 12.As an employee I want to Inquire centre vacancy  So that I can Allocate centre to the food | 8 |
|  | 13.As an employee I want to Inform the authorities  So that I can Take Further Actions. | 2 |
|  | 16.As an employee I want to Record analysed data  So that I can Use it in Future | 5 |
|  | 3.As an employee I want to Study Food Report so that I can See Food Characteristics | 8 | I3=18 | 3 |
|  | 8.As an employee I want to Check centre resources  So that I can Find centres with required resources | 5 |
|  | 10.As an employee I want to Confirm food report study  So that I can Decide further actions | 5 |
|  | 4.As an employee I want to Contact with food tech doctor so that I can Understand the report well | 13 | I4=18 | 4 |
|  | 14.As an employee I want to Analyse food health report  So that I can Suggest survival centre | 5 |
|  | 6.As an employee I want to Study Required treatment  So that I can Decide further actions | 8 | I5=18 | 5 |
|  | 9.As an employee I want to Study food behaviour  So that I can Observe behavioural changes | 5 |
|  | 15.As an employee I want to Communicate with User  So that I can Get User Requirements | 5 |

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| **Process-1** | **Recommend Centre List** | **SP** | **IC** | **IP** |
| **Task Description** | 1.As a Caretaker I want to Access food Report  So that I can Study food Report. | 5 | I1=20 | 1 |
|  | 5.As a Caretaker I want to Verify data in the database  So that I can Ensure data Authenticity. | 13 |
|  | 13.As a Caretaker I want to Assign parameters for comparison  So that I can Compare the survival centres. | 2 |
|  | 2.As a Caretaker I want to Get all the details of food so that I can Observe carefully the characteristics. | 5 | I2=20 | 2 |
|  | 3.As a Caretaker I want to Retrieve food Status chart so that I can Study food status | 8 |
|  | 5.As a Caretaker I want to Fetch online tiffin service Database  So that I can Get all the details. | 5 |
|  | 8.As a Caretaker I want to Enlist All the Survival Online tiffin service s.  So that I can Compare their characteristics. | 2 |
|  | 7.As a Caretaker I want to Consider Food health issues  So that I can Relate to the survival centres. | 5 | I3=20 | 3 |
|  | 10.As a Caretaker I want to Check centre availability  So that I can Inform the user | 2 |
|  | 12.As a Caretaker I want to Authenticate Centre data  So that I can Avoid Security issues. | 13 |
|  | 6.As a Caretaker I want to Analyse Facility Details  So that I can Compare with food report. | 8 | I4=18 | 4 |
|  | 9.As a Caretaker I want to Create a activity plan  So that I can Work on Prescribed Actions. | 5 |
|  | 11.As a Caretaker I want to Get Centre Work Environment  So that I can Determine the relationships among employees | 5 |
|  | 14.As a Caretaker I want to Define various attributes of Centres  So that I can Categorize the Centres | 5 | I5=18 | 5 |
|  | 16.As a Caretaker I want to Create Centre list  So that I can Confirm From the Manager. | 13 |
|  | 15.As a Caretaker I want to Arrange manager meeting  So that I can Confirm Centre Attributes. | 5 | I6=10 | 6 |
|  | 17.As a Caretaker I want to Finalize recommended list  So that I can Provide it to the User | 5 |

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| **Process-2** | **Obtain User Interests** | **SP** | **IC** | **IP** |
| **Task Description** | 1.As an employee I want toAcquire user interest  So that I can Provide Survival centre List. | 5 | I1=20 | 1 |
|  | 3.As an employee I want toProcure Facility details so that I can Show to the User | 13 |
|  | 6.As an employee I want toStudy food comfort chart  So that I canCheck available related centres. | 2 |
|  | 2.As an employee I want toFetch survival Online tiffin service data so that I can Provide Whenever Necessary. | 8 | I2=20 | 2 |
|  | 5.As an employee I want toRead the user queries so that I canAnswer to them | 5 |
|  | 7.As an employee I want toAsk user requirements  So that I canSuggest online tiffin service | 5 |
|  | 13.As an employee I want toPromote the data  So that I canSubmit to the database. | 2 |
|  | 4.As an employee I want toCreate Query Template  So that I canAsk user to fill the template | 8 | I3=19 | 3 |
|  | 8.As an employee I want toGet food Treatment details  So that I canMatch with survival online tiffin service facilities. | 8 |
|  | 10.As an employee I want toShow User final recommended list so that I canFinalize the centre from user | 3 |
|  | 9.As an employee I want toAnalyse report data  So that I canTake further decisions. | 5 | I4=18 | 4 |
|  | 11.As an employee I want toConfirm Centre from user  So that I canMake Further Proceedings | 8 |
|  | 15.As an employee I want toProvide User centre details  So that I canAssure user will make to the centre | 5 |
|  | 12.As an employee I want toFinalize centre From authorities  So that I canConvey the user | 8 | I5=16 | 5 |
|  | 16.As an employee I want toInform associated centre about the user so that I canGo to further actions. | 8 |
|  | As an employee I want toSecure the data  So that I canAvoid any conflicts. | 13 | I6=13 | 6 |

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# 6. USER STORIES: GOAL 6 – Notify Food survival Status

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| **Objective-1** | **Process Food Status** | **SP** | **IC** | **IP** |
| **Task Description** | 7.As an Online tiffin service Manager Optimize food status so that I canControlled experimentation to improve online tiffin service | 13 | I1=20 | 1 |
|  | 3.As an Online tiffin service Manager Extract Food Information so that I canKnow whether what efforts need to be taken for further improvement | 5 |
|  | 2.As an Online tiffin service Manager Keep Food Activity so that I canReport it to User | 2 |
|  | 4.As an Online tiffin service Manager Validate Food Status so that I canHave current food status | 8 | I2=20 | 2 |
|  | 8.As an Online tiffin service Manager Extract Food Data so that I canAchieve the speed of retrieval | 8 |
|  | 1.As an Online tiffin service Manager Accumulate Food Data so that I canKeep a record of it | 3 |
|  | 15.As an Online tiffin service Manager Inform Food Status Progress so that I canAssure user about foods growth | 1 |
|  | 6.As an Online tiffin service Manager Ensure Data Correctness so that I canCheck whether the food data is correct or not | 5 | I3=20 | 3 |
|  | 9.As an Online tiffin service Manager Display Food Progress Status so that I canAssure user about food growth | 5 |
|  | 10.As an Online tiffin service Manager Process the Feedback’s Details so that I canEnsure the food performance | 5 |
|  | 16.As an Online tiffin service Manager Rectify Food Needs so that I canDemonstrate the results | 5 |
|  | 11.As an Online tiffin service Manager Provide Status Report so that I canEnsure whether user are satisfied with caretaker activities | 8 | I4=20 | 4 |
|  | 14.As an Online tiffin service Manager Create Statistical Report so that I canProvide it to user | 8 |
|  | 12.As an Online tiffin service Manager Access the Status so that I canFeed it to the processes | 3 |
|  | 5.As an Online tiffin service Manager Arrange Meeting Schedules so that I canReport food activities to user | 1 |
|  | 17.As an Online tiffin service Manager Know Foods Status so that I canAnalyse status Promote | 8 | I5=18 | 5 |
|  | 18.As an Online tiffin service Manager Finalize Food Status Report so that I canTake further improvements | 8 |
|  | 13.As an Online tiffin service Manager Provide Detailed Guidance so that I canObtain food status feedback | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process-1** | **Fetch Food Status** | **SP** | **IC** | **IP** |
| **Task Description** | 8.As a Caretaker I want to Know the user’s priorities so that I canDecide on providing good content | 13 | I1=20 | 1 |
|  | 1.As a Caretaker I want to Render Food Status so that I canKeep a track of status | 5 |
|  | 3.As a Caretaker I want to Extract status data source so that I canRefine food status | 2 |
|  | 4.As a Caretaker I want to Permit status pre-fetching so that I canProcess it for further changes | 8 | I2=20 | 2 |
|  | 6.As a Caretaker I want to Establish pre-fetching of status details so that I canEnable faster searching | 8 |
|  | 2.As a Caretaker I want to Accumulate Food Data so that I canExtract the useful information | 3 |
|  | 12.As a Caretaker I want to Fix future status Promote Date | 1 |
|  | 9.As a Caretaker I want to Process the similar queries so that I canShow the results | 8 | I3=20 | 3 |
|  | 5.As a Caretaker I want to Execute search query entered by user so that I canProcess it as per requirement | 5 |
|  | 7.As a Caretaker I want to Conserve status Promotes order so that I canTrack status changes | 5 |
|  | 13.As a Caretaker I want to Retrieve all food status so that I canBe helpful to other users | 2 |
|  | 14.As a Caretaker I want to Create food status Report so that I canUser can access undergone treatments | 8 | I4=20 | 4 |
|  | 10.As a Caretaker I want to See food status so that I canCheck current status | 5 |
|  | 11.As a Caretaker I want to Optimize food status so that I canKnow more about food growth | 3 |
|  | 15.As a Caretaker I want to Finalize Caretaker feedback so that I canTake further improvements | 1 |
|  | 16.As a Caretaker I want to Fetch Caretaker feedback data so that I canverify data redundancies | 3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process-2** | **Notify End User** | **SP** | **IC** | **IP** |
| **Task Description** | 5.As a Online tiffin service Manager I want to Generate Auto Notify System so that I canMinimize user involvement | 13 | I1=20 | 1 |
|  | 1.As a Online tiffin service Manager I want to Retrieve Food Status so that I canNotify status of food to user | 5 |
|  | 10.As a Online tiffin service Manager I want to Locate notification points so that I canMake user more specific | 2 |
|  | 3.As a Online tiffin service Manager I want to Choose media so that I canSend Notification via GCM,SMS or email | 8 | I2=20 | 2 |
|  | 2.As a Online tiffin service Manager I want to Generate Notification so that I canSpecify purpose of notification | 5 |
|  | 7.As a Online tiffin service Manager I want to Retrieve Treatment Details so that I canGenerate Bill | 5 |
|  | 16.As a Online tiffin service Manager I want to Notify End User so that I canMake services transparently | 2 |
|  | 6.As a Online tiffin service Manager I want to Remind user via Email/SMS so that I canGuarantee that user got notification | 8 | I3=20 | 3 |
|  | 12.As a Online tiffin service Manager I want to Eliminate irrelevant notifications so that I canEnsure no one receives them | 5 |
|  | 8.As a Online tiffin service Manager I want to Notify Bill amount so that I canReduce overhead of change at online tiffin service cash counter | 3 |
|  | 13.As a Online tiffin service Manager I want to Examine notifications so that I canEnsure to notification delivery | 3 |
|  | 9.As a Online tiffin service Manager I want to Render notification so that I canEnsure the platforms target | 1 |
|  | 15.As a Online tiffin service Manager I want to Notify changed deadlines so that I canMinimize direct interaction | 8 | I4=20 | 4 |
|  | 17.As a Online tiffin service Manager I want to Store details of notification so that I canAvoid repeated notifications | 8 |
|  | 4.As a Online tiffin service Manager I want to Create Efficient notification System so that I canSend notification | 3 |
|  | 11.As a Online tiffin service Manager I want to Provide online tiffin service information so that I canIdentify Authentic Notification | 1 |
|  | 14.As a Online tiffin service Manager I want to Know treatment deadline so that I canSubmit it in time | 5 | I5=5 | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Objective-2** | **Show Review Details** | **SP** | **IC** | **IP** |
| **Task Description** | 10.As a Caretaker I want to Process the feedback’s details so that I canEnsure the food performance | 13 | I1=20 | 1 |
|  | 2.As a Caretaker I want to Retrieve user Rating so that I canSort food care list as per ratings | 5 |
|  | 3.As a Caretaker I want to Extract useful review so that I canExtract the user details from database | 2 |
|  | 1.As a Caretaker I want to Obtain User Review so that I canIdentify user satisfaction | 8 | I2=20 | 2 |
|  | 7.As a Caretaker I want to Extract Food Data so that I canAchieve the speed of retrieval | 5 |
|  | 12.As a Caretaker I want to Conserve User record so that I canFind the exact interested area | 5 |
|  | 15.As a Caretaker I want to Create statistical Report so that I canProvide it to users | 2 |
|  | 6.As a Caretaker I want to Permit Feedback Reminder so that I canEnsure the message gets delivered | 8 | I3=20 | 3 |
|  | 16.As a Caretaker I want to Inform foods Progress so that I canAssure user about food growth | 5 |
|  | 19.As a Caretaker I want to Provide Food Database so that I canConvey about food performance | 5 |
|  | 4.As a Caretaker I want to Arrange Meeting Schedules so that I canReport foods activities to users | 1 |
|  | 13.As a Caretaker I want to Retrieve Food Graph so that I canInform food details to user | 1 |
|  | 9.As a Caretaker I want to Analyse the graph so that I canGather the posts which are vacant and occupied | 8 | I4=19 | 4 |
|  | 11.As a Caretaker I want to Provide feedback form so that I canEnsure whether users are satisfied with day care activities | 8 |
|  | 5.As a Caretaker I want to Evoke graph statistics so that I canGather information and make a complete graph | 3 |
|  | 17.As a Caretaker I want to Rectify Food Needs so that I canDemonstrate the results | 8 | I5=19 | 5 |
|  | 18.As a Caretaker I want to Know User Feedback so that I canAnalyse Feedback | 8 |
|  | 8.As a Caretaker I want to Display Food progress so that I canAssure user about food growth | 3 |
|  | 14.As a Caretaker I want to Provide Detailed Guidance so that I canObtain user feedback | 3 | I6=3 | 6 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process-1** | **Request User Feedback** | **SP** | **IC** | **IP** |
| **Task Description** | 8.As a Online tiffin service Manager I want to Apply prioritization technique so that I canPrioritize users feedback | 13 | I1=20 | 1 |
|  | 2.As a Online tiffin service Manager I want to Decide Channel so that I canBest to accomplish our goals | 5 |
|  | 1.As a Online tiffin service Manager I want to Define gather feedback process so that I canUnderstand why we are seeking feedback | 2 |
|  | 6.As a Online tiffin service Manager I want to Gather feedback so that I canKeep record of it | 8 | I2=20 | 2 |
|  | 4.As a Online tiffin service Manager I want to Conduct customer visits so that I canGather feedback tends to cost a lot more time and resource | 5 |
|  | 13.As a Online tiffin service Manager I want to Access food Service Feedback so that I canFeed it to the processes | 5 |
|  | 12.As a Online tiffin service Manager I want to Process Feedback Details so that I canEnsure the food performance | 2 |
|  | 9.As a Online tiffin service Manager I want to Use MoSCoWso that I canTake more lean approach | 8 | I3=20 | 3 |
|  | 10.As a Online tiffin service Manager I want to Rank Review so that I canRank based on user growth, Satisfaction, Service, Quality etc | 8 |
|  | 5.As a Online tiffin service Manager I want to Encourage customer so that I canSubmit feature request | 3 |
|  | 3.As a Online tiffin service Manager I want to In-person meetings so that I canGet a straight answers from customer | 1 |
|  | 14.As a Online tiffin service Manager I want to Create Statistical report so that I canProvide it to user | 8 | I4=19 | 4 |
|  | 15.As a Online tiffin service Manager I want to Provide Feedback Changes so that I canKeep the system Promoted | 8 |
|  | 11.As a Online tiffin service Manager I want to Access Feedback so that I canCheck the user feedback | 3 |
|  | 17.As a Online tiffin service Manager I want to Know Users Feedback so that I canAnalyse Feedback | 8 | I5=18 | 5 |
|  | 7.As a Online tiffin service Manager I want to Put all into one place so that I canMake it simple to reference later | 5 |
|  | 16.As a Online tiffin service Manager I want to Use Expert Details so that I canDemonstrate the results | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process-2** | **Review Survival Centre** | **SP** | **IC** | **IP** |
| **Task Description** | 11. As a User I want to Process feedback’s details so that I canEnsure the online tiffin service performance | 13 | I1=20 | 1 |
|  | 3.As a User I want to Extract Survival Care Information so that I canKnow whether what efforts need to be taken for further improvement | 5 |
|  | 1.As a User I want to Accumulate Data so that I canKeep a record of it | 2 |
|  | 6.As a User I want to Ensure data correctness so that I canCheck whether the user data is correct or not | 8 | I2=20 | 2 |
|  | 7.As a User I want to Permit Feedback Reminder so that I canEnsure the message gets delivered | 5 |
|  | 8.As a User I want to Extract online tiffin service Data so that I canAchieve the speed of retrieval | 5 |
|  | 15.As a User I want to Provide Detailed Guidance so that I canObtain users feedback | 2 |
|  | 9. As a User I want to Display Online tiffin service progress so that I canAssure user about online tiffin service growth | 8 | I3=20 | 3 |
|  | 12. As a User I want to Provide feedback form so that I canEnsure whether parents are satisfied with day care activities | 8 |
|  | 4.As a User I want to Extract useful information so that I can | 3 |
|  | 2.As a User I want to Keep Online tiffin service Activity so that I canReport it to online tiffin service | 1 |
|  | 16.As a User I want to Create statistical Report so that I canProvide it to online tiffin service s | 8 | I4=20 | 4 |
|  | 19.As a User I want to Finalize Users Review so that I canTake further improvements | 8 |
|  | 10. As a User I want to Communicate user Result so that I canDisplay online tiffin service result to users | 3 |
|  | 5.As a User I want to Arrange Meeting Schedules so that I canReport user activities to online tiffin service | 1 |
|  | 13. As a User I want to Access feedback so that I canFeed it to the processes | 5 | I5=13 | 5 |
|  | 14. As a User I want to Demonstrate success page so that I canEnsure the validation of the entered data. | 3 |
|  | 17.As a User I want to Inform online tiffin service s advancement so that I canAssure users about online tiffin service advancement | 3 |
|  | 18.As a User I want to Rectify users’ Needs so that I canDemonstrate the results | 2 |

# T.Y. B. Tech.

**CS 3001: Software Engineering Laboratory**

### Assignment No: 8

**Online Tiffin Service**

**Software Configuration Management**

***1-04-2019***

**` Version 1.0**

|  |  |  |  |
| --- | --- | --- | --- |
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### Academic Year: 2018-19 Semester: II

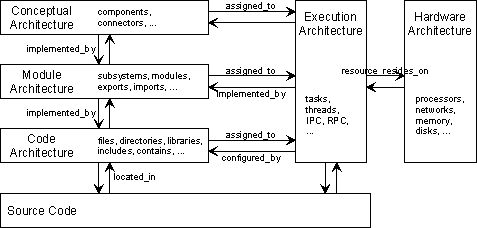
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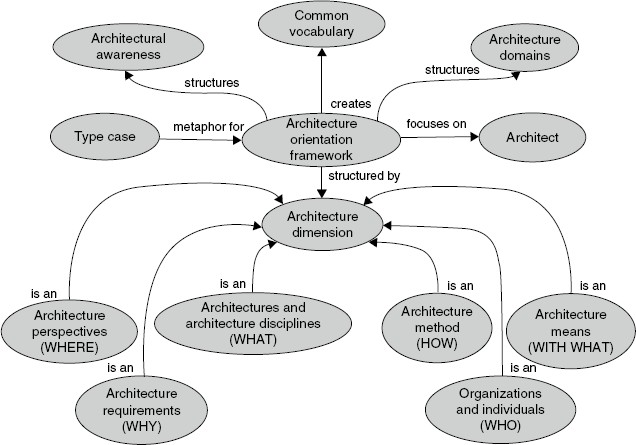
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1. **INTRODUCTION**

The software engineering community realized that software architecture is not only about structures (components and interfaces), but also about system behavior (interaction between components, protocols). Furthermore, this community introduced an architectural design phase in the system life cycle, in which requirements should be satisfied and which should serve as a basis for detailed design activities. Researchers and engineers in software engineering have adopted the term 'architecture' as well. Nevertheless, there is no consensus about the subject; no universally-accepted definition of the term 'architecture' is agreed upon.

* + Perry and Wolf (1992) consider a software architecture as a set of architectural elements that have a particular form. Similar to Zachman and Van Waes, they distinguish three different classes of architectural elements: processing, data, and connecting elements. Perry and Wolf consider an architecture as a necessary framework in which requirements are satisfied and which serves as a basis for the design.
  + Garlan et al. (1995) stated that a system's architectural design is concerned with describing its decomposition into computational elements and their interactions. Design tasks at this level include organizing the system as a composition of components; developing global control structures; selecting protocols for communication, synchronization, and data access; assigning functionality to design elements; physically distributing the components; scaling the system and estimating performance; defining the expected evolutionary paths; and selecting among design alternatives.
  + Soni et al. (1995) stated that software architecture is concerned with capturing the structures of a system and the relationships among the elements both within and between structures. Software architectures describe how a system is decomposed into components, how these components are interconnected, and how they communicate and interact with each other. Based on a survey on the role of architecture in the design and development of large systems within Siemens, Soni et al. notice that different structures are used at different stages of the development process. Each structure describes the system from a different perspective.
  + Soni et al. argue that the four different architectures they distinguished are needed because of the growing complexity of software throughout history (see Figure 1.3). Initially, only the code architecture was required. The module and execution architecture became necessary when systems became larger and distributed. Now, software engineers would like to use communicating objects and assemblies of reused components. Therefore, a high-level structure is described in the form of a conceptual architecture. On the other hand, Zachman and especially Van Waes reason that their various architectures are wanted as representation for each of the involved actors.
  + Garlan and Perry (1995) found that the term 'architecture' is used in a number of ways in software engineering. Among the various uses are a) the architecture of a particular system, as in 'the architecture of this system consists of the following three components,' b) an architectural style, as in 'this system adopts a client-server architecture,' and c) the general study of architecture, as in 'the papers in that issue are about architecture.'
  + A discussion group at Carnegie Mellon University's Software Engineering Institute developed a typical definition: the structure of the components of a program/system, their interrelationships, and principles and guidelines governing their design and evolution over time. They represent a spectrum in the software architecture community about the emphasis that should be placed on architecture - its constituent parts, the whole entity, the way it behaves once built, or the process of building it. Taken together, they reflect the various aspects of software architecture.
  + Software architecture is concerned with the design and implementation of IT systems. From the viewpoint of architectural activity, software architecture covers the steps necessary to design and implement architecture. With regard to the structural aspect of architecture, software architecture describes the structures of IT systems. From this point on, the terms “IT system” and “system” are used synonymously provided no explicit differentiation is necessary. A system is a unit that consists of integrated software and hardware building blocks and exists for the purpose of fulfilling
  + a functional objective. To achieve this objective, it communicates with its environment and must take account of the conditions defined by the environment.





# ARCHITECTURE OBJECTIVES

* **To manage complexity**: An architectural model allows one to present the essence of a complex system in a (simple) model. An architectural model supports the ability to comprehend complex systems; it presents them at a level of abstraction at which a system's high-level design can be understood. It supports the analysis of relationships as an aid to understand complexities in a design environment. In particular, an architecture is needed in complex, dynamic environments (Van Waes, 1991). Zachman states that the increased scope of design and levels of complexity of system implementations are forcing the use of architectural models for defining and controlling the interfaces and the integration of the system components (Zachman, 1987). Architectural models abstract away from details instead of from the essential complexity. Brooks claims that 'the complexity of software is an essential property, not an accidental one' (Brooks, 1995; p. 183). Descriptions of a software entity that abstract away its complexity often abstract away its essence.
* **To serve as a set of specifications**: An architecture may be seen as a result of the design process. It is laid down in specifications, which are derived from the requirements, and from which the desired system can be built. Specifying an architecture is concerned with the specification of components, their interactions, and the constraints on these entities and their interactions. These unambiguous

specifications define the scope of future development activities, and serve as a basis for further design and implementation activities.

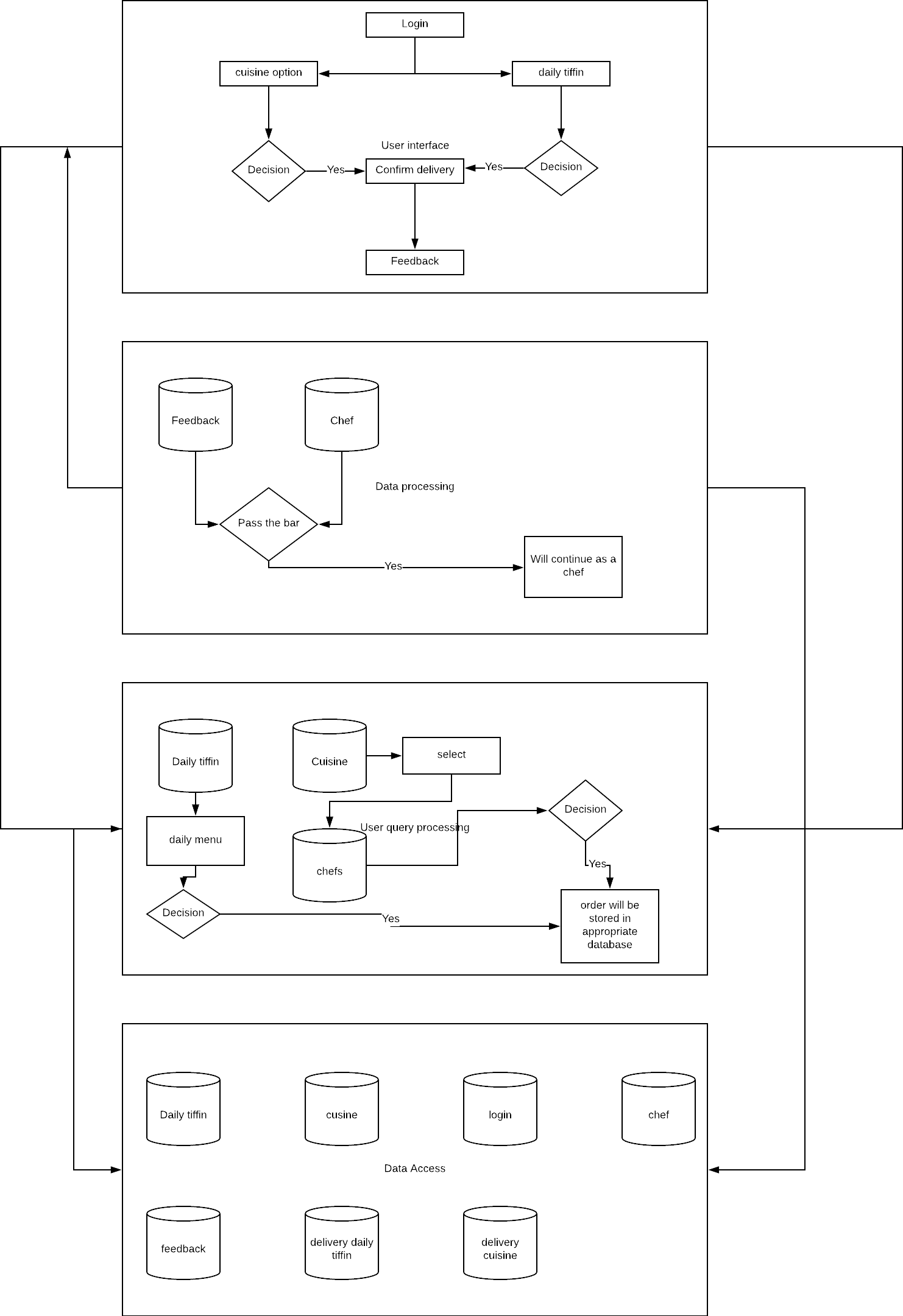
* **Means of communication**: Furthermore, an architectural model may play the role of a means of communication during a system (re-)design process. The architect can use it to visualise various aspects of the system to be designed, thus providing the various parties concerned with a basis for discussion and decision-making. By producing order in chaos, architectural models help each party to clarify its perception of the problem. Visualisation and explanation of the relevant aspects of the problem area, and the possible relationships between them, supports the various actors to focus their attention on the essential elements, thus providing a basis for discussion of the problems.
* **To indicate the most vital system elements**: Furthermore, the architecture determines the nature and quality of a system. As such, an architectural model indicates the invariant or most vital system elements, which must be treated carefully during system re-design. Systems evolve and are adapted to new uses, just as buildings change over time and are adapted to new uses. One frequently accompanying property of evolution is an increasing brittleness of the system, caused by violations of the architecture. Violations of the architecture frequently lead to an increase in problems in the system and contribute to an increasing resistance to change, or at least to changing gracefully.
* **Means to reduce the impact of changes**: Another role of an architecture involves its contribution to the effective re-design of a system. The architecture should reduce the impact of changes to the lower component levels, and to as few components as possible. Both for shop floor control systems and for products, it is advantageous to use as many parts of the existing system or product design as possible. In a re-engineering trajectory, an architectural model of the system allows one to pinpoint and discuss the areas requiring major change, and to integrate the new specifications into the existing model. Furthermore, architectural change is not so much determined by the system components, as well by the interfaces between these components; the ease with which components can be modified, replaced, or with which the system can be extended by new components is dependent on the extent to which the interfaces of the new components match those of the old ones.
* **Means to gain strategic benefits**: Finally,(product) architecture may have certain strategic importance for a company. The development of a new product brings together a wide range of technologies. Only a few of these technologies contribute to ultimate competitive advantage. Successful companies do not compete on (and even give away) the enabling technologies on which their core utility is based. By the architectural design of functions that can be filled in by cheap, standard components, companies profit from the strong competition in the markets for these components, and are free to focus on their true sources of competitive value. In addition, a company might extend the value of its product by publishing the product's interfaces to the outside world. Other enterprises might use this product as an indispensable part for their own products

# SYSTEM DESIGN SPECIFICATION

A modular architecture may naturally result in a layered architecture; modules are assigned to specific layers. Layers reflect design decisions based on allowable relations and interfacing constraints. The layers in an architecture represent allowable interfaces among modules. Modules within a layer can communicate with each other. Modules in different layers can communicate with each other only if their respective layers are adjacent (Soni et al., 1995). A layer builds on its underlying layer, which at its turn builds on its underlying layer as well. Consequently, a layer explicitly uses the functionality of its underlying layer, and implicitly uses the functionality of all layers underneath its underlying layer.

Layers are used mainly to solve mapping problems. The mapping task is decomposed in layers: each layer performs a specific part of the mapping. In this sense, the division in layers is part of an architecture. The advantage of layers is the flexibility: changes can be made inside a layer without affecting other layers. A disadvantage of a layered architecture is its rigidity: new layers are hard to be shoved in between existing layers, since this requires a (major) change of interfaces. Examples of the application of layers in mappings are:

* the targets of an enterprise must be mapped on its physical processes; therefore, a strategical, tactical, and operational layer are distinguished;
* data from a database must be mapped on computer screens; therefore, an internal, conceptual, and external layer are distinguished.



|  |  |
| --- | --- |
| **Layer-1** | **User interface** |
| **Purpose** | This the layer that the users will use to interact with the system. |
| **Related Components** | User interfaces. |
| **Software Interfaces** | Layer 3 and layer 4 interfaces. |
| **Composition Style** | **Generalization** |
| **Communication Pattern** | **Vertical** |
| **Implementation Steps** | 1. Create website 2. Host server 3. Display different cuisines 4. Display daily tiffin menu 5. Generate form for feedbacks |

|  |  |
| --- | --- |
| **Layer-2** | **Data processing** |
| **Purpose** | This Layer processes the data of the system and makes decisions for future basskiij. |
| **Related Components** | Goal 3 ang goal 6 components |
| **Software Interfaces** | Layer 1 and layer 4 inters paces |
| **Composition Style** | **Aggregation** |
| **Communication Pattern** | **Horizontal** |
| **Implementation Steps** | 1. Access the data. 2. Filter rightful data 3. Encode data in a format suitable for statistical models 4. Check and cross validation model. 5. Generate results of each chef. |

|  |  |
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| **Layer-3** | **User queries processing** |
| **Purpose** | The User Query Processing is done in this layer of components. |
| **Related Components** | Goal 4 and Goal 5 components Software |
| **Software Interfaces** | Layer 1 and Layer 4 Interfaces |
| **Composition Style** | **Composition** |
| **Communication Pattern** | **Horizontal** |
| **Implementation**  **Steps** | 1.  2. |

|  |  |
| --- | --- |
| **Layer-4** | **Data access** |
| **Purpose** | The Data Access and Acquiring is done in this layer. |
| **Related Components** | Goal 1 and Goal 2 components |
| **Software Interfaces** | Layer 3 and layer 4 interfaces. |
| **Composition Style** | **Aggregation** |
| **Communication**  **Pattern** | **Vertical** |
| **Implementation Steps** | 1. Fetch data from Data sources. 2. Validate received data.. 3. Populate cube option using database. 4. Chefs profile will be block; 5. Building chef profile. 6. Analyse groups and represent group insights in the database. |

|  |  |
| --- | --- |
| Layer-5 | Output |
| Purpose | This layer describes the overall outputs that the system shall generate |
|  |  |
| Related Components | Provide the list of food items here |
| Software Interfaces | Indicate the Interfaces used |
| Composition Style | **Generalization** |
| Communication Pattern | **Vertical** |
| Implementation Steps | 1. Food demand  2. Estimated food values  3. Offers Information  4. Menu |

# COMPONENT SPECIFICATION: GOAL-1

|  |  |
| --- | --- |
| ***Component Name*** | **Order Receiving System** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Receiving Orders and Choosing Chefs. |
| ***Processing*** | 1. Offer Various Cuisines 2. Collect User Preferances. 3. Choose Chef to Prepare the Order 4. Provide Delivery Means. 5. Get Feedback 6. Filter Data Sources 7. Collect customer Data 8. Analyze customer Data 9. Ascertain Data Correctness 10. Determine Data Abnormalities |
| ***Reference*** | Order System |
| ***Constraints*** | Choose Minimum Order |
| ***Composition*** | Sub-System 1,Module-1 |
| ***Resources*** | MySql Database. |
| ***Interactions*** | None |
| ***Interface/Tasks*** | Provide Efficient Means to select the Order. |

## Procedure Definition Language (Pseudo-code):

INTERFACE: Name of the Interface BEGIN

mysqli\_connect(Database) connect\_to(Data) Display(Cuisines) INPUT(Preferances)

Insert into order from preferances IF(ORDER LESS THAN MINIMUM)-THEN:

DISPLAY(INVALID ORDER) ELSE: ORDER=COLLECT\_DATA() CHOOSE\_CHEF(ORDER) CHOOSE\_ROUTE()

END

# COMPONENT SPECIFICATION: GOAL-1-Objective-1

|  |  |
| --- | --- |
| ***Component Name*** | **Data Acquirer** |
| ***Audience*** | Internal Stakeholders |
| ***Responsibilities*** | State computational abilities here. |
| ***Processing*** | 1. Filter Data Sources 2. Collect customer Data 3. Analyze customer Data 4. Ascertain Data Correctness 5. Determine Data Abnormalities 6. Remove Data Abnormalities 7. Clean Data 8. Use Compatible DBMS 9. Insert customer Data into DBMS 10. Create Cloud Backup of Database |
| ***Reference*** | Data Acquirer |
| ***Constraints*** | RDBMS |
| ***Composition*** | Sub - System 1, Module 1 |
| ***Resources*** | customer Database |
| ***Interactions*** | Components: 1 |
| ***Interface/Tasks*** | Acquire Data, Remove Data Abnormalities |

## Procedure Definition Language (Pseudo-code):

INTERFACE: DataAquirer interface

DO

Find Data Sources

foreach(TABLE table in database):

if table is desired:

fetch tht table

BEGIN

GET DATA SCOURCES;

import database libraries

construct prepared Statement

insert query in tht statement

run that query

if(query\_runned)

Insert extracted data into resource database

print done

else

print do this process again

IF(DATA SOURCES AVAILABLE) THEN

CHECK DATA DIMENSIONS;

FILTER DATA

FETCH DATA INTO TEMPORARY DATASET;

CREATE DBMS INSTANCE;

INSERT DATA FROM TEMPORARY DATASET INTO DBMS INSTANCE;

RETURN DATA;

ELSE

RETURN NULL;

END

# 6.COMPONENT SPECIFICATION: GOAL-1 OBJECTIVE-2

|  |  |
| --- | --- |
| ***Component Name*** | Data Analyzer |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | State computational abilities here. |
| ***Processing*** | 1. Determine Data Sources  2. Filter Data Sources  3. Collect customer Data  4. Analyze customer Data  5. Filter Appropriate and important Data  6. Segregate customer Data  7. Determine Data Correctness  8. Remove Incorrect Data  9. Clean Data Abnormality  10.Insert Extracted Data into Database |
| ***Reference*** | Data Analyzer |
| ***Constraints*** | Processing Speed |
| ***Composition*** | Sub - System 1, Module 2 |
| ***Resources*** | customer Database |
| ***Interactions*** | Components: 1 |
| ***Interface/Tasks*** | Filter Relevant Data, Ascertain Correctness of Data |

## Procedure Definition Language (Pseudo-code):

INTERFACE RAW\_DATA\_ANALYSER

DO

Ascertain data correctness

Clean customer Data Abnormalities

BEGIN

FOR EACH COLUMN IN DATA LOOP

IF(VALUES OF COLUMN NOT IN EXPECTED RANGE) THEN

REPORT DATA ABNORMALITY;

CLEAN ABNORMAL DATA;

import database libraries

construct prepared Statement

insert query in tht statement

run that query

if(query\_runned)

Insert extracted data into resource database

print done

else

print do this process again

END LOOP;

END

**7.COMPONENT SPECIFICATION: GOAL-2**

|  |  |
| --- | --- |
| ***Component Name*** | **Efficient Route Finder** |
| ***Audience*** | Customer |
| ***Responsibilities*** | Using Google maps Api to find the nearest route to the customer |
| ***Processing*** | 1. Get the Customer Address 2. Using Google Maps launch the query using googlemaps API 3. Get the least traffic route to the customer 4. Give the Route to the Delivery Boy 5. Filter Data Sources 6. Collect customer Data 7. Analyze customer Data 8. Ascertain Data Correctness 9. Determine Data Abnormalities   10. Clean Data Abnormality |
| ***Reference*** | Delivery System |
| ***Constraints*** | Limit to the use of API |
| ***Composition*** | Sub-System 1, Module 1 |
| ***Resources*** | Customer Details |
| ***Interactions*** | None |
| ***Interface/Tasks*** | Acquire Customer Details , Give Efficient Route |

**Procedure Definition Language (Pseudo-code):**

INTERFACE: Name of the Interface

MIN=0;

BEGIN

connect\_maps(google\_maps)

LAUNCH\_QUERY(“SHORTEST PATH TO ADDRESS”+CUSTOMER ADDRESS)

WHILE(END OF DATA) DO:

IF(DIST<MIN) THEN: MIN=DIST

END

GET\_ROUTE(DIST) SEND\_ROUTE()

# 8.COMPONENT SPECIFICATION: GOAL-2 OBJECTIVE-1

|  |  |
| --- | --- |
| ***Component Name*** | **Player Information Extractor** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | State computational abilities here. |
| ***Processing*** | 1. Acquire customer Data  2. Analyze customer Data  3. Verify Data  4. Store customer information into Database  5. Extract customer data  6. Extract customer position  7. Classify customer according to position  8. Extract Important customer Attributes  9. Classify customers According to those attributes  10. Display customers information |
| ***Reference*** | ExtractCustomerPositionFromFile |
| ***Constraints*** | MySQL Database |
| ***Composition*** | Sub - System 1, Module 3 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | Update Database, Perform Classification of customer |

## Procedure Definition Language (Pseudo-code):

INTERFACE: ExtractCustomerPositionFromFile(Customer\_Name)

DO

Extract customer Information

BEGIN

import database libraries

connect to db

If(connencted)

foreach(TABLE table in database):

if table is desired:

fetch tht table

WHILE (Database.PName == Customer\_Name) LOOP

Name=ExtractName()

Position=ExtractPosition()

Ranking=ExtractRanking()

LINKS=ExtractLINKS()

Do all data validation

encrypt in XML or JSON

Return Customer

END LOOP

OUTPUT (“CUSTOMER NOT FOUND”)

END

# 9.COMPONENT SPECIFICATION: GOAL-2 OBJECTIVE-2

|  |  |
| --- | --- |
| ***Component Name*** | **Customer Groups Creator** |
| ***Audience*** | Internal Stakeholders |
| ***Responsibilities*** | State computational abilities here. |
| ***Processing*** | 1. Acquire customer Data  2. Analyze customer Data  3. Remove Abnormalities from Data  4. Store customer information into Database  5. Extract customer data  6. Filter customer Data according to Attributes  7. Group customer according to attributes  8. Check for incorrect Data within the groups  9. Verify the customer groups  10. Display the groups when necessary |
| ***Reference*** | ExtractCustomerAbilitiesFromFile |
| ***Constraints*** | MySQL Database |
| ***Composition*** | Sub - System 1, Module 3 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 10 to 18 |
| ***Interface/Tasks*** | Update Database, Perform Classification of customer |

## Procedure Definition Language (Pseudo-code):

INTERFACE: ExtractCustomerAbilitiesFromFile(Customer\_Name)

DO

Extract customer Information

BEGIN

Function

Open dataset

Connect to Database

WHILE (Database.PName == Customer\_Name) LOOP

Name=ExtractName()

BasicDetails=ExtractDetails()

Orders=ExtractOrder()

Quality=ExtractQuality ()

ADD THIS CUSTOMER IN GROUP

PRINT NEW GROUP DETAILS

Return CUSTOMER

END LOOP

END

# 10.COMPONENT SPECIFICATION: GOAL-3

|  |  |
| --- | --- |
| ***Component Name*** | **Customer Profile Processor** |
| ***Audience*** | External Stakeholders |
| ***Responsibilities*** | Process customer Profile Requests, Obtain and Populate Profiles |
| ***Processing*** | 1. Pre-Process Customer Data 2. Train Statistical Model 3. Generate Customer Features 4. Test Statistical Model 5. Save Trained Model 6. Optimize Choices 7. Choose Statistical Model 8. Tune statistical model hyper-parameters 9. Associate Customer Profiles 10. Probe Statistical Models |
| ***Reference*** | **Customer\_Profile\_Processor** |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system 2, Module 1 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 10 |
| ***Interface/Tasks*** | Check incorrect scaling, scale customer profiles |

## Procedure Definition Language (Pseudo-code):

INTERFACE: CUSTOMER\_PROFILE\_PROCESSOR

DO

if(CUSTOMER\_Details==NOT SCALED)

SCALE CUSTOMER PROFILES

Normalise data

else

Normalise data

BEGIN

for(Statistical Model in menu):

Check if its acceptable

Choose Statistical Model

if(Model is good)

Optimise Choices

After few epoch

Tune statistical model hyper-parameters

Associate Customer Profiles and model

CUSTOMER\_DATA\_PREPROCESSOR();

TRAIN\_DATA,TEST\_DATA := TRAIN\_TEST\_SPLIT(CUSTOMER DATA);

MODEL1=MODEL\_SELECTOR();

END

# 11.COMPONENT SPECIFICATION: GOAL-3 OBJECTIVE-1

|  |  |
| --- | --- |
| ***Component Name*** | **Customer Data Pre-Processor** |
| ***Audience*** | External Stakeholders |
| ***Responsibilities*** | Process Customer Profile Requests, Obtain and Populate Profiles |
| ***Processing*** | 1. Access Customer Data 2. Remove Abnormalities from Data 3. Generate Customer Attributes 4. Group Customer Attributes 5. Create Customer Profiles 6. Insert Data into Profiles 7. Associate Customer profiles 8. Add Customer Features 9. Demonstrate Important Customer information 10. Generate Customer Features |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system 2, Module 1 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | Choose Statistical Model  , Optimise Choices |

## Procedure Definition Language (Pseudo-code):

INTERFACE: CUSTOMER\_PROFILE\_PREPROCESSOR

DO

CHECK INCORRECT SCALING

SCALE CUSTOMER PROFILES

BEGIN:

import database libraries

connect to db

If(connencted)

foreach(TABLE table in database):

if table is desired:

fetch tht table

IF(DATA IS NOT SCALED) THEN

BRING DATA TO SAME SCALE

FEED SCALED DATA TO DATABASE INSTANCE

RETURN;

END

# 12.COMPONENT SPECIFICATION: GOAL-3 OBJECTIVE-2

|  |  |
| --- | --- |
| ***Component Name*** | **Model Selector** |
| ***Audience*** | External Stakeholders |
| ***Responsibilities*** | Process Customer Profile Requests, Obtain and Populate Profiles |
| ***Processing*** | 1. Pre-process Customer Data 2. Associate Customer Profiles 3. Generate Customer Features 4. Probe Statistical Models 5. Choose Statistical model 6. Train Statistical Model 7. Test Statistical Model 8. Save Trained and Tested Model 9. Decide Statistical Model Parameters 10. Optimize Choices |
| ***Reference*** | MODEL\_SELECTOR |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system 2, Module 2 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | Tune statistical model hyper-parameters, Associate Customer Profiles and model |

## Procedure Definition Language (Pseudo-code):

INTERFACE: MODEL\_SELECTOR  
DO  
  Probe Statistical Models  
  Choose Statistical Model  
  Optimise Choices  
  Tune statistical model hyper-parameters  
  Associate Customer Profiles and model  
BEGIN  
  LOAD SELECTED MODELS;  
  FOR I IN SELECTED MODELS LOOP:  
    TRAIN I  
    RESULTS[I] := I.MAKE\_PREDICTIONS(TEST\_DATA);  
  END LOOP;  
  OPTIMAL\_MODEL := DECIDE\_OPTIMAL\_MODEL(RESULTS);  
  TUNED\_OPTIMAL\_MODEL = TUNE(OPTIMAL\_MODEL);  
  RETURN TUNED\_OPTIMAL\_MODEL;  
END

# 13.COMPONENT SPECIFICATION: GOAL-4

|  |  |
| --- | --- |
| ***Component Name*** | **USER QUERY PROCESSOR** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Process user queries |
| ***Processing*** | 1. Filter Relevant Data from Database 2. Make Data Structure to fit Data 3. Normalize Data Structure According to Model 4. Predict Value using Model 5. Scale Value Accordingly 6. Append Value in Database 7. Form Filling by End User 8. Validate player Information 9. Determine Data Abnormality 10. Append Customer Data |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 2 , Module |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | Get User Queries, Get User Input |

## Procedure Definition Language (Pseudo-code):

INTERFACE:USER\_QUERY\_PROCESSOR

DO

GET USER QUERIES

GET USER INPUT

BEGIN

BEGIN

CHOOSE MODEL

SET HYPERPARAMETER

FIND HIGHEST R SQUARE VALUE

DO DIMENSIONAL REDUCTIONALITY

KEEP PCA HIGHEST

IF(QUERY) THEN

USER\_QUERY\_RECOGNIZER(USER\_QUERY);

ELSE

USER\_INPUT\_HANDLER(USER\_INPUT);

END LOOP;

END

# 14.COMPONENT SPECIFICATION: GOAL-4 OBJECTIVE-1

|  |  |
| --- | --- |
| ***Component Name*** | **USER QUERY RECOGNIZER** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Get user queries |
| ***Processing*** | 1. Access Database  2. Retrieve User Input  3. Analyze User Input  4. Convert Input to Query  5. Recognize User Query  6. Enter into Database  7. Execute Query  8. Retrieve Data After Execution  9. Display Data Requested  10. Update Database if necessary |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 2 , Module: 2 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | Get User Queries, Process User Queries And Generate Predictions |

## Procedure Definition Language (Pseudo-code):

INTERFACE USER\_QUERIES\_RECOGNIZER

DO

GET USER QUERIES

GENERATE STATS

BEGIN

KEEP NEW DATA

FIT THE DATA IN MODEL

PREDICT VALUE

CUSTOMER\_DATA = FETCH\_CUSTOMER\_DATA(USER\_QUERY);

LOAD MODEL;

PREDICTION = MODEL.PREDICT(CUSTOMER\_DATA);

OUTPUT(CUSTOMER\_DATA);

OUTPUT(‘PREDICTED VALUE:’);

OUTPUT(PREDICTION);

END

# 15.COMPONENT SPECIFICATION: GOAL-4 OBJECTIVE-2

|  |  |
| --- | --- |
| ***Component Name*** | **USER INPUT HANDLER** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Get user input |
| ***Processing*** | 1. Retrieve User Input Data 2. Create form for user 3. Retrieve Data from the Form 4. Analyze User Input Data 5. Take Certain Action on User Input 6. Access Database 7. Update Dataset 8. Notify User 9. Fix irregular output 10. Append Input |
| ***Reference*** | USER\_INPUT\_HANDLER |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 2 , Module: 2 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | Get User Input, Process User Input And Append To Database |

## Procedure Definition Language (Pseudo-code):

INTERFACE USER\_INPUT\_HANDLER  
DO  
GET USER INPUT  
PROCESS USER INPUT AND APPEND TO DATABASE  
BEGIN  
FOR USER\_INPUT IN USER\_INPUTS LOOP  
    IF USER\_INPUT HAS MISSING VALUES THEN  
      OUTPUT(‘MISSING ORDER’);  
      RETURN;  
    END IF;  
  IF USER\_INPUT HAS ABNORMALITIES THEN  
      OUTPUT(‘WARNING’);  
      FIX ABNORMALITIES;  
  END IF;  
END LOOP;  
APPEND USER\_INPUTS TO USER\_INPUTS DATABASE;  
END

# 16.COMPONENT SPECIFICATION: GOAL-5

|  |  |
| --- | --- |
| ***Component Name*** | **ORDER STATISTICS DEMONSTRATOR** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Fetch input customer id/ customer name |
| ***Processing*** | 1. Locate Customer in Database 2. Retrieve Customer Statistics 3. Showcase Important Information On Customer 4. Demonstrate Customer performance 5. Contract Customer Details 6. Display Customer Rankings 7. Compare Customer Rankings 8. Demonstrate Graphs Visualizing Order Details 9. Show Customer net worth graph 10. Go Back to Other Customer |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 2 , Module: 2 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | None |

## Procedure Definition Language (Pseudo-code):

INTERFACE ORDER\_STATISTICS\_DEMONSTRATOR:  
DO    
BEGIN  
  FETCH INPUT CUSTOMER\_ID/CUSTOMER\_NAME;  
  CONNECT TO DATABASE;  
  IF(CUSTOMER EXISTS IN DATABASE) THEN  
    STATISTICS=ORDER\_STATISTICS\_GENERATOR();  
    DISPLAY\_ORDER\_STATISTICS(STATISTICS);  
    RETURN;  
  ELSE  
    RETURN("CUSTOMER NOT FOUND");  
  END IF;  
END

# 17.COMPONENT SPECIFICATION: GOAL-5 OBJECTIVE-1

|  |  |
| --- | --- |
| ***Component Name*** | **Order Statistics Generator** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Fetch required statistics from database for Customer |
| ***Processing*** | 1. Access Database  2. Locate Customer in Database  3. Search Customer Data  4. Retrieve Customer Statistics  5. Show Important Information On Customer  6. Demonstrate Customer performance  7.Locate Customer in Database  8.Retrieve Customer Statistics  9.Showcase Important Information On Customer  10.Demonstrate Customer performance |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 2 , Module: 2 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | None |

## Procedure Definition Language (Pseudo-code):

INTERFACE ORDER\_STATISTICS\_GENERATOR  
DO  
  IMPORT DATABASE LIBRARIES  
BEGIN  
  CONNECT TO DATABASE;  
  FETCH CUSTOMER DATA;  
  FETCH SELECTED STATISTICS;  
  FETCH REQUIRED STATISTICS FROM DATABASE FOR ORDER;  
  RETURN STATISTICS;  
END

# 18.COMPONENT SPECIFICATION: GOAL-5 OBJECTIVE-2

|  |  |
| --- | --- |
| ***Component Name*** | **Order Statistics Displayer** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Generate HTML/JS code for graphs |
| ***Processing*** | 1. Access Database  2. Locate Customer in Database  3. Retrieve Order Statistics  4. Show Important Information On Customer  5. Demonstrate Customer performance  6. Display Customer Rankings  7. Display Estimate Value  8. Demonstrate Value Graph  9. Show Graphs Demonstrating Customer Details  10. Recommend Other Customer |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 2 , Module: 2 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | None |

## Procedure Definition Language (Pseudo-code):

INTERFACE DISPLAYER\_ORDER\_STATISTICS  
DO  
  
BEGIN  
  CONNECT TO DATABASE;  
  GET STATISTICS;  
  DETERMINE GRAPHS TO BE DISPLAYED;  
  GENERATE HTML/JS CODE FOR GRAPHS;  
  DISPLAY GRAPHS;  
  RETURN;  
END

# 19. COMPONENT SPECIFICATION: GOAL-6

|  |  |
| --- | --- |
| ***Component Name*** | **Order Value Estimator** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Estimate Customer Values |
| ***Processing*** | 1. Check Customer Data  2. Fetch Customer Data  3. Feed data to the model  4. Generate predictive Value  5. Get predictive Value from Model  6. Display calculated value  7. Process and Transmit to Client  8. Update Customer Data  9. Store Customer Data  10. Display important data features |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 3 , Module: 1 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | None |

## Procedure Definition Language (Pseudo-code):

INTERFACE: - Customer Value Estimator

DO: Estimate Customer Values

BEGIN

if(CONNECT(DATABASE))

foreach(Entry : database)

Customer=Customer\_Validator(Entry)

Data=Unwrap\_XML(Customer)

Html\_Code=Customer\_Showcaser(Data)

GenerateHTML(Html\_Code)

Save this Html

else

Show ERROR

END

# 20.COMPONENT SPECIFICATION: GOAL-6 OBJECTIVE-1

|  |  |
| --- | --- |
| ***Component Name*** | **Order Data Validator** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Fetch data from all tables |
| ***Processing*** | 1. Check Customer Data  2. Fetch Customer Data  3. Feed data to the model  4. Generate predictive Value  5. Get predictive Value from Model  6. Display calculated value  7. Process and Transmit to Client  8. Update Customer Data  9. Store Customer Data  10. Display important data features |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 3 , Module: 1 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | None |

## Procedure Definition Language (Pseudo-code):

INTERFACE: - Customer Validator

DO

Go to given index in database

Fetch data from all tables

BEGIN

Check all data acquired is right

ADD Details in an Customer Object

Make Object Immutable

Parse the Object using XML

END

# 21.COMPONENT SPECIFICATION: GOAL-6 OBJECTIVE-2

|  |  |
| --- | --- |
| ***Component Name*** | **Predicted Value Generator** |
| ***Audience*** | Stakeholders |
| ***Responsibilities*** | Make Graphs |
| ***Processing*** | 1. Check Customer Data  2. Fetch Customer Data  3. Feed data to the model  4. Generate predictive Value  5. Get predictive Value from Model  6. Display calculated value  7. Process and Transmit to Client  8. Update Customer Data  9. Store Customer Data  10. Display important data features |
| ***Reference*** | Procedure Name |
| ***Constraints*** | Environment Issues |
| ***Composition*** | Sub-system: 3 , Module: 1 |
| ***Resources*** | Customer Database |
| ***Interactions*** | Components: 1 to 18 |
| ***Interface/Tasks*** | None |

## Procedure Definition Language (Pseudo-code):

INTERFACE: - Customer Showcaser

DO

Format the table

Show Basic Details Tab

Show data of Customer

Make Graphs

Show Contract Details

Show Predicted Price

Show similar orders

BEGIN

If(table\_formated())

If(data\_available())

Show output();

Else

Show Error;

END

**T.Y. B. Tech.**

**CS 3001: Software Engineering Laboratory**

## Assignment No: 9

**Online Tiffin Service**

**System Review and Acceptance**

***26-04-2019***

***Version 1.0***

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Group Information** | | | |
| **Roll. No.** | **Gr. No.** | **Name** | **Roles** |
| 30 | **161406** | **Manaswi Lukkad** | **Analyst** |
| 14 | **161407** | **Priti Deo** | **Designer** |
| 05 | **161646** | **Sanket Kulkarni** | **Developer** |

**Approved By: Dr M. R. Dube**

Academic Year: 2018-19 Semester: II

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# INTRODUCTION

*At the time of the scheduled peer review, ensure proper representation and preparation by the reviewers. Provide clarifications on the work products. Present comments and listen to the comments of the other reviewers. Comments can be presented either by page or by reviewer. Keep the comment discussions short with a focus on detection, not correction. Editorial comments are provided separately and are not discussed at the scheduled review.*

*Participate in categorizing comments. The comments will be categorized and documented as errors, defects, and action items. Refer to the definitions for the categorization rules, which are summarized as follows:*

* *Errors (i.e., problems in the material currently under peer review).*

*Optionally, errors are subcategorized as major (affects functionality and/or performance) and minor (does not affect functional- ity and/or performance).*

* *Defects (i.e., problems in materials previously peer reviewed).*

*Optionally, defects are also subcategorized as major and minor.*

*Note: Defects will further be categorized as delivered or undelivered in the program’s change request system.*

* *Action items (i.e., unresolved comments requiring further investigation)*
* *A comment can remain categorized as a comment if the reviewers and presenters agree that there is no error, defect, or action item required.*

*To complete the peer review you must identify errors, defects, and action items to be resolved and documented. If needed, follow the program’s or project’s defined decision-making processes to elevate and reconcile any issues encountered in resolving peer review errors, defects, or action items with appropriate stakeholders. To ensure completion, per- form the following:*

* *Correct all errors and update the peer review information to indicate that the error is resolved.*
* *Submit change request paperwork for all defects. The status and tracking of the defect corrections are then handled through the change request system. The defects associated with the peer review should indicate this transfer and are categorized as resolved, allowing the peer review to be closed.*
* *Resolve and complete all action items. If any action items cannot be completed within the two-week period, these action items should be moved to the program- or project-level action item tracking system. The action items associated with the peer review should indicate this transfer and are categorized as resolved, allowing the peer review to be closed.*

# REVIEW TYPES

*Design and code reviews promise to improve software quality, ensure compliance with standards, and serve as a valuable teaching tool for developers. As with most practices, there are subtle nuances surrounding how they're performed that can dramatically affect their value. In some organizations, reviews are a valuable aspect of the software lifecycle. In others, they are a necessary evil tainted with political bureaucracy and big egos. Suboptimal reviews conducted late in the lifecycle are often misguided due to few objective guidelines that help guide the review process. When used throughout the development lifecycle, code and design quality metrics are valuable inputs to the review process.*

* 1. *Reviews Increase Agility Continuous Integration.*

*Agile practices are abundant, and for many teams interested in increasing their agility, valuable energy and resources have been devoted to improving these practices. Because of this, many teams have abandoned reviews while emphasizing other aspects of agility. But, reviews are an important tool in the agile toolkit.*

*A driving principle of the Agile Manifesto is continuous attention to technical excellence. Another is embracing and harnessing change as an opportunity to increase customer advantage. For developers, change often begins and ends with modifications to the source code. A poorly designed application with smelly code is a breeding ground for risk that makes change incredibly difficult, and is the greatest technical inhibitor to increased agility. Effective reviews that emphasize design quality and code cleanliness are an important aspect of increased agility. Reviews done right help ensure continuous attention to technical excellence. Unfortunately, not all reviews are done right.*

*1.2 Review Worst Practices*

*Some development teams find reviews a healthy and valuable asset to developers and the project team. Other teams realize little value from their review process. There are numerous causes for painful and ineffective reviews. Some symptoms of ineffective reviews include:*

* *Witch hunt reviews - Many reviews degrade quickly into attack and defend mode. This often occurs because the developer who wrote the code feels attacked and threatened when reviewers make direct and opinionated statements about the code. Nothing could be less productive.*
* *Curly brace reviews - Some reviews emphasize formatting and comments instead of more serious problems. Is placement of curly braces and misspelled comments really that important? Curly brace reviews are feeding ground for the anal retentive, and provide no real value.*
* *Blind reviews - Often times, reviewers walk into the review meeting having never laid eyes on the code they are about to review. Most of the review time is spent trying to figure out what the code does. Spending time in the review meeting attempting to understand the code instead of reviewing it for more serious ailments is a waste of time.*
* *Exclusionary reviews - Many times, the code provided for the review is only a sampling of the code written. For example, unit tests might be excluded from the review. In an unhealthy review environment, providing impartial and incomplete code listings will leave the reviewers wondering how the code actually works.*
* *Tree killer review - If you can't baffle them by providing half of what they need to understand the code, then maybe overwhelming them by providing thousands of lines of code might work. Waiting until codebase is incredibly large to host the first review is entirely ineffective. Not only is it to difficult to provide effective feedback on a large codebase, these reviews are often held late in the lifecycle and do not allow the developer to improve her code based on the feedback received.*
* *Token review - It's not uncommon for management to dictate that reviews be held. Token reviews are typically held for political reasons. Management wants to ensure that all code is reviewed for auditing purposes. Unfortunately, developers realize very little value surrounding these reviews. Any problems found are not fixed unless they are absolutely critical. Since the primary motivation is an audit trail for management, the team has little motivation to improve the code.*
* *World review- The reviews conducted with great number of people in attendance. This can be incredibly intimidating for the developers whose code is being reviewed, and it is not sure what value it provides to invite so many people. A few developers, up to five, should serve all the needs required of the review process. If more people want to provide input, there are better ways.*

*The Design checklist is as follows:*

* *Deficiencies and conflicts in requirements, architecture, or program/project plans will be reported.*
* *Design decisions and the decision rationales will be recorded according to plans and defined processes.*
* *Top-level software components of the software end item will be identified and described.*
* *Static relationships between top-level software components will be defined.*
* *Dynamic relationships between top-level software components will be defined.*
* *The concepts of execution of the software end item and its components will be defined.*
* *External interfaces of the software end item and its components will be identified and described.*
* *Top-level software components will be decomposed into lower-level software units.*
* *Internal interfaces between software units will be identified and described according to the standards identified by the project.*
* *Design traceability data will be documented according to plans, processes, and product standards.*
* *Design definitions will be documented according to plans, defined processes, and standards.*
* *Measurement and estimated data will be collected.*
* *Applicable work products will be submitted for peer reviews in accordance with project plans.*
* *Applicable work products will be submitted for control in accordance with program or project plans.*

# VERIFICATION SUMMARY

*Note: The verification summary is required to be written for all the objectives and processes as they were detailed as User Stories. Replicate the standard template for objectives and process for the goals.*

# VERIFICATION STEPS: GOAL-1

|  |  |
| --- | --- |
| Objective-1 | Acquire Customer Data |
| Purpose | This will ensure the reliability and correctness of system. |
| Target Audience | Customers |
| Status | Completed |
| Role: | **As an**end user, developer |
| Verification Steps | 1. Verify that Customer profiles creation request is registered. |
|  | 2. Verify that Customer profiles are built. |
|  | 3. Verify created database and schema. |
|  | 4. Verify that Customer data has been fetched. |
|  | 5. Verify Database structure. |
|  | 6. Verify that Customer database has been populated. |
|  | 7. Verify that Customer database backup is available. |
|  | 8. Verify that the backup accessible. |
|  | 9. Verify proper database privileges and security. |
|  | 10. Verify Customer page content. |

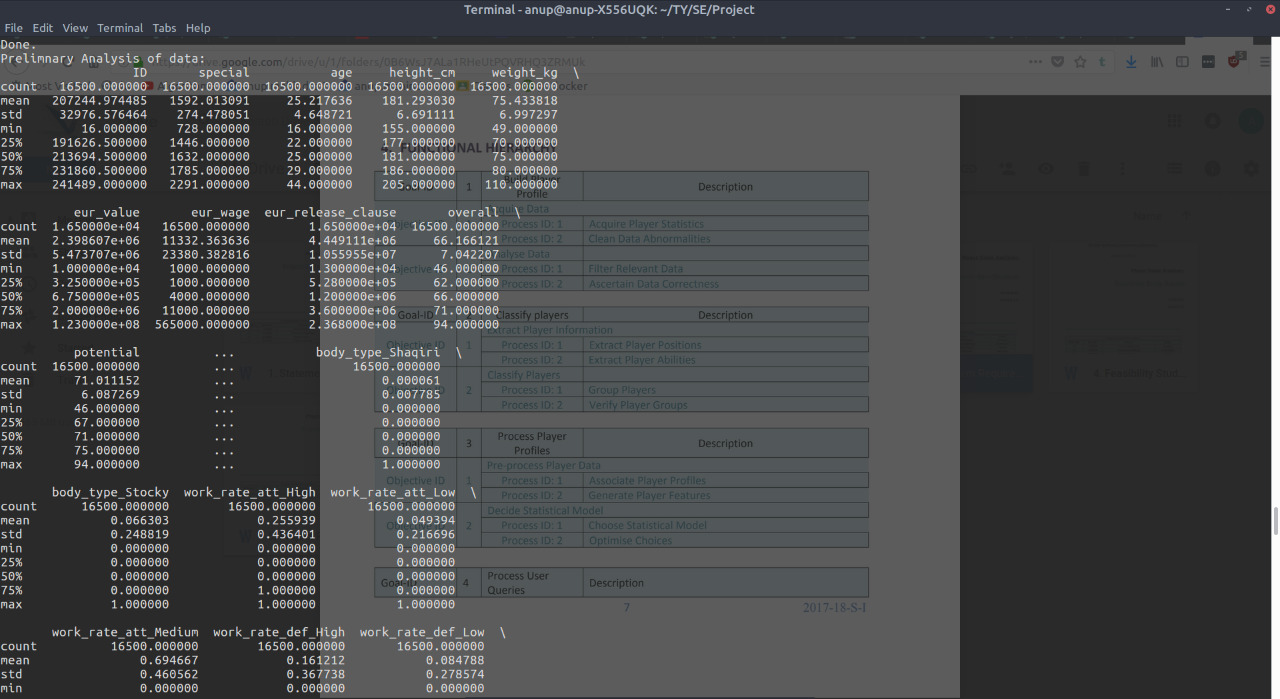
|  |  |
| --- | --- |
| Process-1 | Acquire Customer Statistics |
| Purpose | Collect Customer Statistics for creating Customer ranking index used to find transfer values. |
| Target Audience | Internal Stakeholders |
| Status | Completed |
| Role: | **As a**developer |
| Verification Steps | 1. Verify that required fields are correctly decided. |
|  | 2. Validate the Customer statistics |
|  | 3. Verify that the fields in database are created |
|  | 4. Validate Customer profile inputs |
|  | 5. Verify that the Customer statistics are added |
|  | 6. Validate the data limits and bounds |
|  | 7. Verify population of the Customer database |
|  | 8.Verify proper indexing of the database |
|  | 9.Verify database structure |
|  | 10. Verify that changes to original database are kept track of. |

|  |  |
| --- | --- |
| Process-2 | Clean Data Abnormalities |
| Purpose | To keep the data relative and precise. |
| Target Audience | Developer |
| Status | On-going |
| Role: | **As a**developer |
| Verification Steps | 1.Validate Customer profile format |
|  | 2.Validate Customer attribute ranges |
|  | 3.Verify graph plotting of values is complete |
|  | 4.Verify that abnormalities, if any are detected |
|  | 5.Verify that the abnormality can be found and accessed |
|  | 6.Verify the method of generating improvised data |
|  | 7.Validate corrected abnormality |
|  | 8.Verify that the changes have been committed on the database |
|  | 9.Verify that the data that was corrected wasn’t in use. |
|  | 10.Verify that the changes are logged |

|  |  |
| --- | --- |
| Objective-2 | Analyse Customer Data |
| Purpose | To decide the Customer analysis process of the system and the methodology to follow. |
| Target Audience | Internal Stakeholders |
| Status | Completed |
| Role: | **As a**developer |
| Verification Steps | 1. Verify Organisation of database attributes |
|  | 2. Verify the Design patterns for attributes |
|  | 3. Verify the output parameters |
|  | 4. Verify the important parameters priority |
|  | 5. Verify the short-listed attributes |
|  | 6. Verify Organisation of the parameters |
|  | 7. Verify the formulated observations |
|  | 8. Verify correspondence with Analysis team |
|  | 9. Verify the consolidation of analysis process |
|  | 10. Verify the final analysis methodology |

|  |  |
| --- | --- |
| Process-1 | Filter Relevant Data |
| Purpose | The purpose is to get detailed, relevant data about Customer which is filtered and curated. |
| Target Audience | Customers |
| Status | On-going |
| Role: | **As an**end user |
| Verification Steps | 1. Verify that a certain Customer can be found |
|  | 2. Verify that the transfer value of Customer can be accessed |
|  | 3. Verify that a curated list of Customerscan be generated |
|  | 4. Verify that similar Customers playing in same position can be found |
|  | 5. Verify that Customers can be ordered by rating |
|  | 6. Verify that all Customers with comparable price can be seen |
|  | 7. Verify that statistics indicating on field behaviour can be accessed |
|  | 8. Verify that the statistics indicating off field characteristics can be accessed |
|  | 9. Verify that Customer’s current team can be seen |
|  | 10. Verify that Customer’s current team’s squad can be seen |

|  |  |
| --- | --- |
| Process-2 | Ascertain Data Correctness |
| Purpose | This will ensure the reliability and correctness of system. |
| Target Audience | Customers |
| Status | Completed |
| Role: | **As an**end user, developer |
| Verification Steps | 1. Validate correct Customer data |
|  | 2. Validate exact information reception |
|  | 3. Verify appropriate info of the Customer |
|  | 4. Validate Customer Data accessibility |
|  | 5. Verify that transfer value is accessible |
|  | 6. Verify Customer value prediction feasiblity |
|  | 7. Verify precise database |
|  | 8. Verify data validation process |
|  | 9. Verify background checks |
|  | 10. Verify the data sources |



# VERIFICATION STEPS: GOAL-2

|  |  |
| --- | --- |
| Objective-1 | Extract Customer Information |
| Purpose | Make groups in the database according to Customer’s attributes to help distinguish them. |
| Target Audience | External Stakeholders |
| Status | On-going |
| Role: | **As a**football club director |
| Verification Steps | 1. Verify that more than 1 Customer can be added. |
|  | 2. Validate saved data. |
|  | 3. Validate Customer Data Extraction. |
|  | 4. Validate Club Squad |
|  | 5. Verify that other club squads can be accessed. |
|  | 6. Verify a Customer’s form can be assessed. |
|  | 7. Verify that market values can be found. |
|  | 8. Verify that other Customers can be searched. |
|  | 9. Verify that Customer background information is available. |
|  | 10. Verify that all parts of system are accessible to user. |

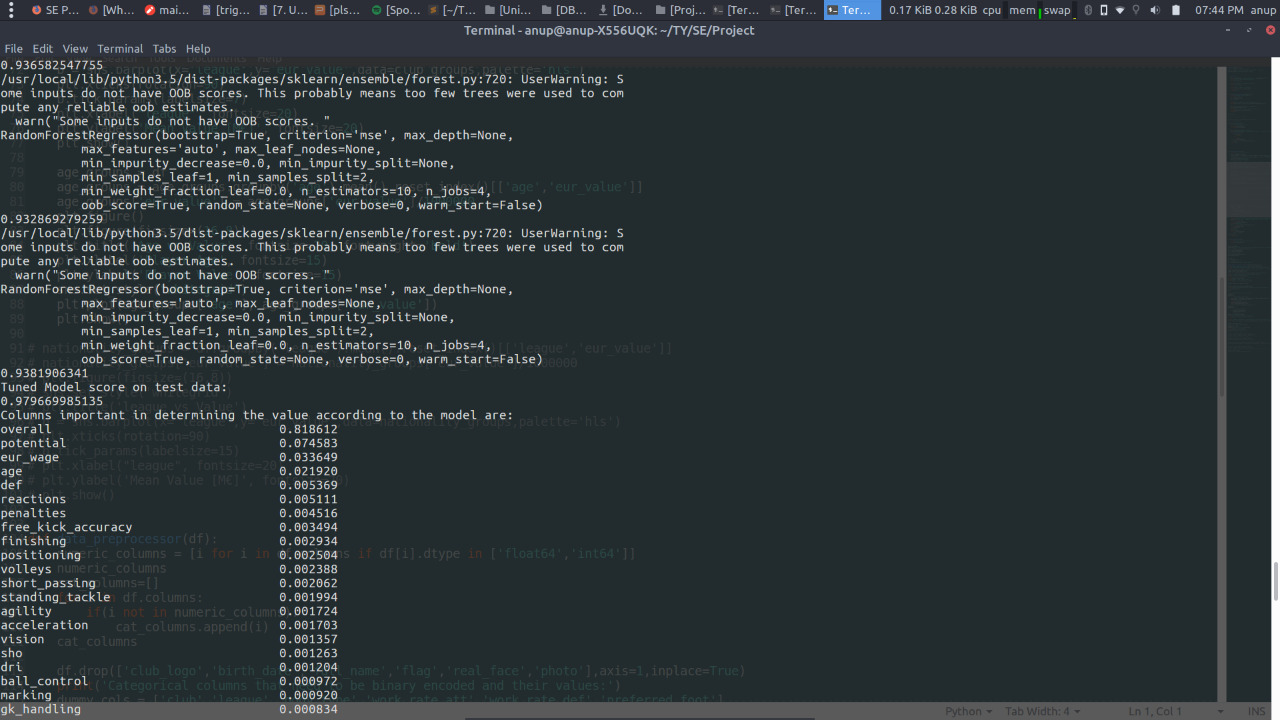
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| --- | --- |
| Process-1 | Extract Customer Position |
| Purpose | It will make it easier to search Customers. |
| Target Audience | External Stakeholders |
| Status | On-going |
| Role: | **As a**Football Club Coach |
| Verification Steps | 1. Verify that Customer positions are listed. |
|  | 2. Verify that the Customer position can be searched. |
|  | 3. Verify Customers can be filtered according to positions. |
|  | 4. Verify that list contains Customers with same position. |
|  | 5. Verify Customer’s other positions are listed to find out playing style. |
|  | 6. Verify Customer’s other positions are listed to find out Customer’s adaptability. |
|  | 7. Verify that Customer rating is listed. |
|  | 8. Verify that Customer value is listed. |
|  | 9. Validate value based on other similar Customers. |
|  | 10. Verify that Customer’s potential is listed. |

|  |  |
| --- | --- |
| Process-2 | Extract Customer Ability |
| Purpose | It will help obtain a better prediction. |
| Target Audience | Customers |
| Status | Completed |
| Role: | **As a**user |
| Verification Steps | 1. Verify that Customer attributes are displayed. |
|  | 2. Verify that club squad is displayed. |
|  | 3. Verify that club fixtures are shown. |
|  | 4. Verify Club form from the news. |
|  | 5. Verify that transfer prices can be compared. |
|  | 6. Verify that Customer skills are displayed. |
|  | 7. Verify that Customer weaknesses can be checked. |
|  | 8. Verify the Customer’s chances of getting injured. |
|  | 9. Validate the Customer statistics comparison. |
|  | 10. Validate the Customer profile pictures. |

|  |  |
| --- | --- |
| Objective-2 | Classify Customers |
| Purpose | To make classes of Customers as per categories. |
| Target Audience | Internal Stakeholders |
| Status | Completed |
| Role: | **As a**Developer |
| Verification Steps | 1. Verify correct data is acquired. |
|  | 2. Verify data distribution is performed. |
|  | 3. Verify inconsistencies are fixed. |
|  | 4. Verify that groups are prototyped. |
|  | 5. Verify Customer groups are established. |
|  | 6. Verify the Customer groups are accessible. |
|  | 7. Validate the basis of grouping. |
|  | 8. Validate encoding method is chosen. |
|  | 9. Validate encoding analysis is established. |
|  | 10. Verify results are integrated. |

|  |  |
| --- | --- |
| Process-1 | Group Customers |
| Purpose | Decide attributes that can decide classes and groups. |
| Target Audience | Customers/ Stakeholders |
| Status | On-going/ Completed |
| Role: | **As a**Developer |
| Verification Steps | 1. Verify Customer data is acquired. |
|  | 2. Validate correct attributes are identified. |
|  | 3. Validate attribute wise data is examined. |
|  | 4. Verify attributes are extracted for grouping. |
|  | 5. Verify inconsistencies are detected. |
|  | 6. Validate inconsistencies are repaired and normalised. |
|  | 7. Validate correctness of data is verified. |
|  | 8. Validate Customer groups creation. |
|  | 9. Verify the groups are demonstrated. |
|  | 10. Validate Customer groups are delivered. |

|  |  |
| --- | --- |
| Process-2 | Verify Customer Groups |
| Purpose | Verify Customer groups formed. |
| Target Audience | Customers/ Stakeholders |
| Status | On-going/ Completed |
| Role: | **As a**developer |
| Verification Steps | 1. Verify Customer groups are accessible. |
|  | 2. Verify Customer groups are analysed. |
|  | 3. Validate conceptualisation of Customer groups is done. |
|  | 4. Verify the basis derived is validated. |
|  | 5. Verify encoding technique is selected. |
|  | 6. Verify technique is valid. |
|  | 7. Validate encoding analysis. |
|  | 8. Verify modified encoding technique. |
|  | 9. Validate results of analysis. |
|  | 10. Verify integrated results. |



# VERIFICATION STEPS: GOAL-3

|  |  |
| --- | --- |
| Objective-1 | Pre-process Customer Data |
| Purpose | Get the database  Standardize it’s format and data type  Make it useful for statistical modelling |
| Target Audience | Customers/ Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Verify raw Customer data |
|  | 2.Validate Customer data |
|  | 3.Verify that irrelevant attributes are disposed |
|  | 4.Verify the grouping and comparison attributes |
|  | 5.Verify the domain knowledge gained |
|  | 6.Verify that the domain knowledge gets represented in features |
|  | 7.Verify Customer features standardization |
|  | 8.Verify the data dimensionality |
|  | 9.Verify different feature selection has been accomplished |
|  | 10.Verify final data with selected features |

|  |  |
| --- | --- |
| Process-1 | Associate Customer Profiles |
| Purpose | Capture the relation between the Customer and attributes  Discard irrelevant information |
| Target Audience | Customers/ Stakeholders |
| Status | Completed |
| Role: | **As a** *developer* |
| Verification Steps | 1.Validate formatted Customer data |
|  | 2.Verify available raw Customer attributes |
|  | 3.Verify only relevant attributes are present |
|  | 4.Verify consistency of selected attributes |
|  | 5.Validate attributes transformation |
|  | 6.Verify the comparison attributes between Customers |
|  | 7.Validate attributes by Customer positions |
|  | 8.Validate attributes by age |
|  | 9.Validate attributes by nationality |
|  | 10.Verify insights gained with data |

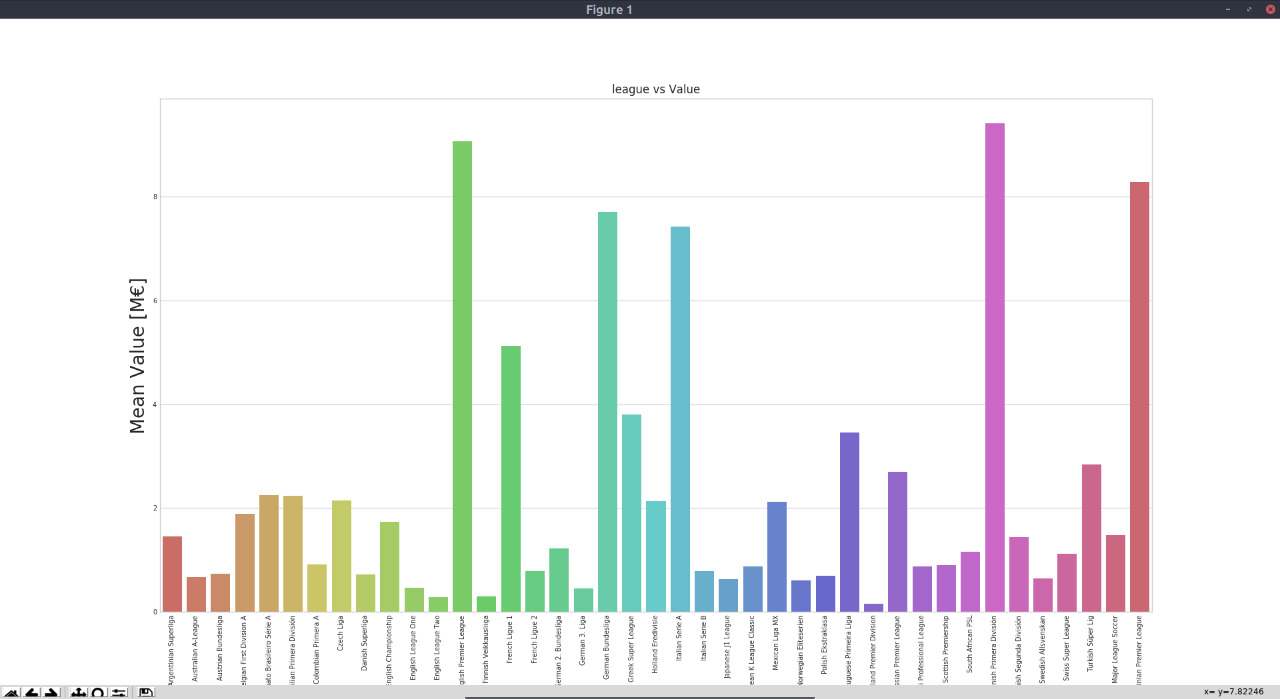
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| --- | --- |
| Process-2 | Generate Customer Features |
| Purpose | Generate the actual features that will be used in the modelling  Verify that no values are categorical  If categorical values exist, encode them in numerical format |
| Target Audience | Customers/ Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Verify tabulation of Customer data |
|  | 2.Verify the list of features that are valuable |
|  | 3.Validate transformations on the features |
|  | 4.Validate transformed features by visualzation |
|  | 5.Verify scaled features |
|  | 6.Verify the scales of the features |
|  | 7.Validate the features in dataset as a whole |
|  | 8.Verify different feature selection strategies |
|  | 9.Validate the application of feature selection strategy to the data |
|  | 10.Verify integration of generated features and methods |

|  |  |
| --- | --- |
| Objective-2 | Decide Statistical Model |
| Purpose | Choose a statistical model  Verify its results  Optimise the parameters and store the model for further usage |
| Target Audience | Customers/ Stakeholders |
| Status | On-going/ Completed |
| Role: | **As a** *developer* |
| Verification Steps | 1.Verify that accessed data is in proper format |
|  | 2.Verify the different statistical models |
|  | 3.Verify the application of a model and its results |
|  | 4.Verify the cross-validation and analysis of models |
|  | 5.Verify and overview analysis |
|  | 6.Verify selected optimal model parameters |
|  | 7.Verify the modified parameters |
|  | 8.Verify the cross-validation of changed parameter results |
|  | 9.Verify the use different scoring methods |
|  | 10.Verify the finalization on the model and parameters |

|  |  |
| --- | --- |
| Process-1 | Choose Statistical Model |
| Purpose | Try different statistical models  Use and cross-validate them  Store the model that performed the best with the default parameters |
| Target Audience | Customers/ Stakeholders |
| Status | On-going/ Completed |
| Role: | **As a** *developer* |
| Verification Steps | 1.Verify the statistical models |
|  | 2.Verify the input data to models is in proper format |
|  | 3.Verify the train test split |
|  | 4.Verify different statistical models |
|  | 5.Verify the results |
|  | 6.Verify results of different models |
|  | 7.Verify cross-validation on models |
|  | 8.Verify the analysis of cross-validation results for models |
|  | 9.Validate the output of selected models |
|  | 10.Verify the analysis |

|  |  |
| --- | --- |
| Process-2 | Optimise Choices |
| Purpose | Get the model stored from earlier process  Tune its parameters and cross-validate the changes  Store the tuned model for use in making predictions |
| Target Audience | Customers/ Stakeholders |
| Status | On-going/ Completed |
| Role: | **As a** *developer* |
| Verification Steps | 1.Verify the optimal model access |
|  | 2.Validate the parameters of the model |
|  | 3.Verify the changed the parameters and the results |
|  | 4.Verify the storage of the results with changed parameters |
|  | 5.Verify the cross-validation of changed parameter results |
|  | 6.Verify the Analysis of the cross-validation result |
|  | 7.Verify the training of the model with optimal parameters |
|  | 8.Verify the testing process of the model |
|  | 9.Verify the different scoring methods used in testing |
|  | 10.Verify the final model and parameters |

# 



# VERIFICATION STEPS: GOAL-4

|  |  |
| --- | --- |
| Objective-1 | Recognise User Queries |
| Purpose | To recognise user input. |
| Target Audience | Customers |
| Status | Completed |
| Role: | **As a** *<type of user>* |
| Verification Steps | 1. Verify large numbers of Customers can be added. |
|  | 2. Verify squads can be found easily. |
|  | 3. Validate Customer data in profile page. |
|  | 4. Verify other teams are visible to user. |
|  | 5. Validate squad Customer data. |
|  | 6. Verify news related to Customer is displayed. |
|  | 7. Validate market values from reliable sources. |
|  | 8. Verify Customer age is displayed |
|  | 9. Verify that nationality is listed. |
|  | 10. Validate the insights were used. |

|  |  |
| --- | --- |
| Process-1 | Standardize Query Format |
| Purpose | Indicate purpose of the process here in 3/4/ statements. |
| Target Audience | Customers/ Stakeholders |
| Status | On-going/ Completed |
| Role: | **As a**database manager |
| Verification Steps | 1. Verify large numbers of Customers can be added. |
|  | 2. Verify squads can be found easily. |
|  | 3. Validate Customer data in profile page. |
|  | 4. Verify other teams are visible to user. |
|  | 5. Validate squad Customer data. |
|  | 6. Verify news related to Customer is displayed. |
|  | 7. Validate market values from reliable sources. |
|  | 8. Verify Customer age is displayed |
|  | 9. Verify that nationality is listed. |
|  | 10. Validate the insights were used. |

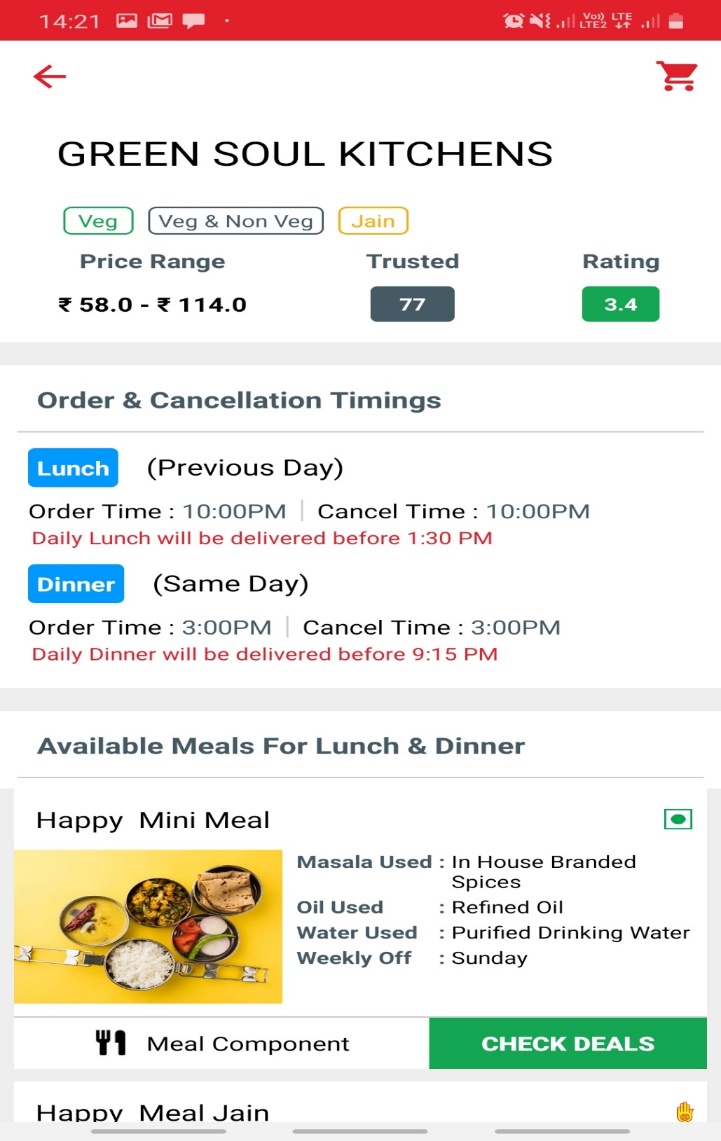
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| --- | --- |
| Process-2 | Execute Prediction |
| Purpose | This will enable the output of the system. |
| Target Audience | Internal Stakeholders |
| Status | Completed |
| Role: | **As a** *developer* |
| Verification Steps | 1. Verify formatted user queries accessed. |
|  | 2. Verify Customer data is used for prediction |
|  | 3. Validate used Customer data. |
|  | 4. Verify input error is found. |
|  | 5. Validate data is normalised. |
|  | 6. Verify predictions process is initiated. |
|  | 7. Validate query data is included. |
|  | 8. Verify model extracts output. |
|  | 9. Verify session is valid after output. |
|  | 10. Verify that the objective is met. |

|  |  |
| --- | --- |
| Objective-2 | Handle User Input Data |
| Purpose | To handle user input data. |
| Target Audience | Customers |
| Status | Completed |
| Role: | **As a** *end user* |
| Verification Steps | 1. Verify all Customers are accessible. |
|  | 2. Verify anomalies are removed. |
|  | 3. Verify errors are found. |
|  | 4. Verify errors are suggested for correction. |
|  | 5. Validate Customer attributes in GUI. |
|  | 6. Verify data is provided to the system. |
|  | 7. Verify data is used in formula. |
|  | 8. Validate model to generate predicted value. |
|  | 9. Validate predicted value. |
|  | 10. Verify correct value is displayed for Customer.. |

|  |  |
| --- | --- |
| Process-1 | Pre-Process User Input Data |
| Purpose | This will pre-process user input data. |
| Target Audience | Internal Stakeholders |
| Status | Completed |
| Role: | As adeveloper |
| Verification Steps | 1.Verify raw Customer data |
|  | 2.Validate processed Customer data |
|  | 3.Verify unnecessary attributes are eliminated |
|  | 4. Verify grouping |
|  | 5.Verify domain knowledge gained |
|  | 6.Validate the domain knowledge features representation |
|  | 7.Verify Customer features standardization |
|  | 8.Validate data dimensionality |
|  | 9.Verify usage of different feature selection strategies |
|  | 10.Validate final data with features |

|  |  |
| --- | --- |
| Process-2 | Append Relevant Dataset |
| Purpose | To append these values in the database. |
| Target Audience | Customers |
| Status | Completed |
| Role: | **As a** *developer* |
| Verification Steps | 1. Verify Customer profiles can be viewed. |
|  | 2. Verify Customer profiles can be accessed. |
|  | 3. Validate removal of anomalies. |
|  | 4. Validate Customer data output. |
|  | 5. Validate data is fed to model. |
|  | 6. Verify errors are compared. |
|  | 7. Validate all attributes are viewable. |
|  | 8. Verify important attributes are segregated. |
|  | 9. Verify estimated value is calculated. |
|  | 10. Validate the Customer profiles are consistent. |





# VERIFICATION STEPS: GOAL-4

|  |  |
| --- | --- |
| Objective-1 | Generate Customer Statistics |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Validate the generated performance score |
|  | 2.Validate the generated chemistry score with other Customers |
|  | 3.Validate the number of goals scored |
|  | 4.Verify the skills the Customer has |
|  | 5.Verify the popularity of the Customer |
|  | 6.Verify the told statistics |
|  | 7.Verify the Customers past achievements |
|  | 8.Validate the Customers previous rating |
|  | 9.Validate the net worth of the Customer |
|  | 10.Validate the collected miscellaneous data |

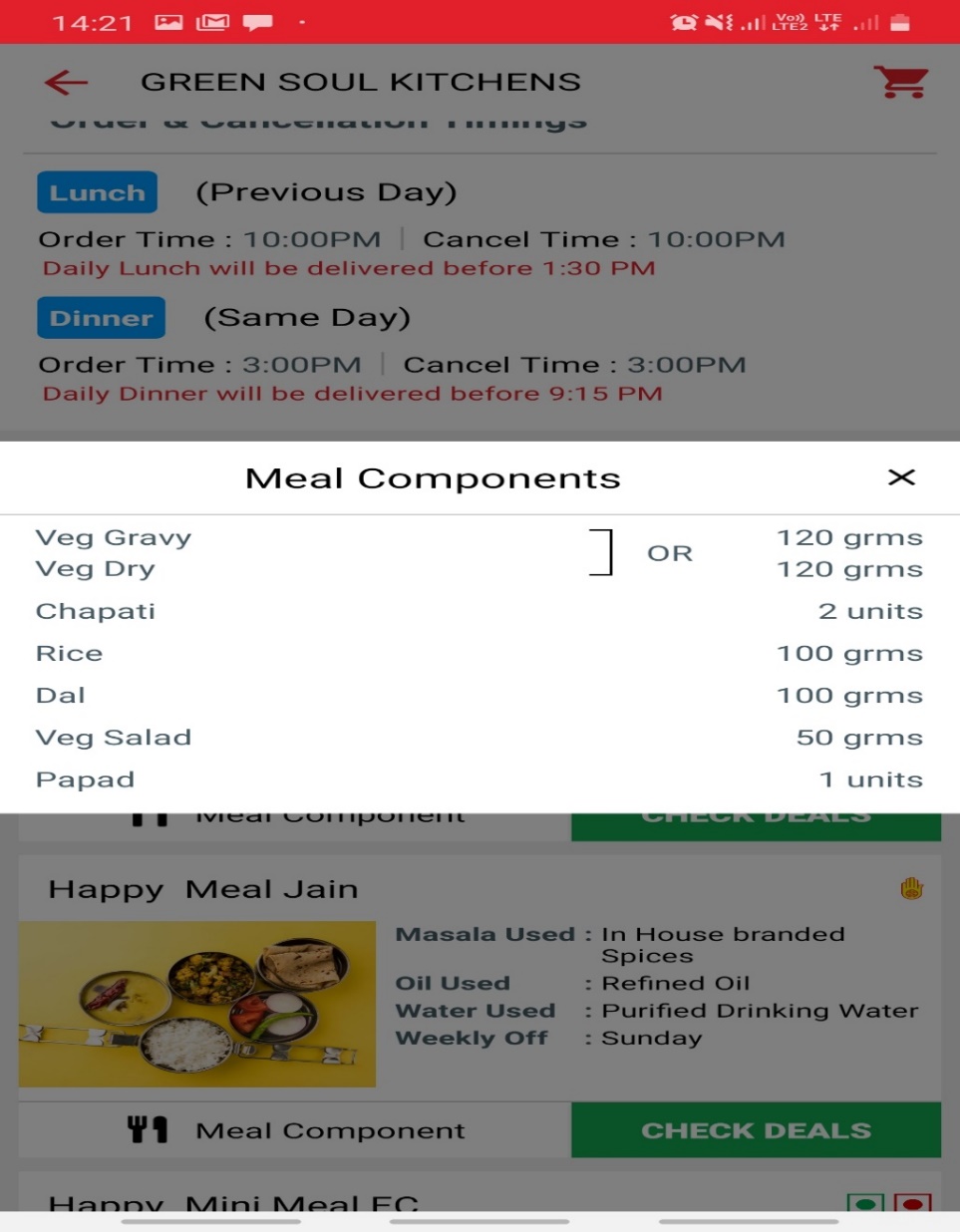
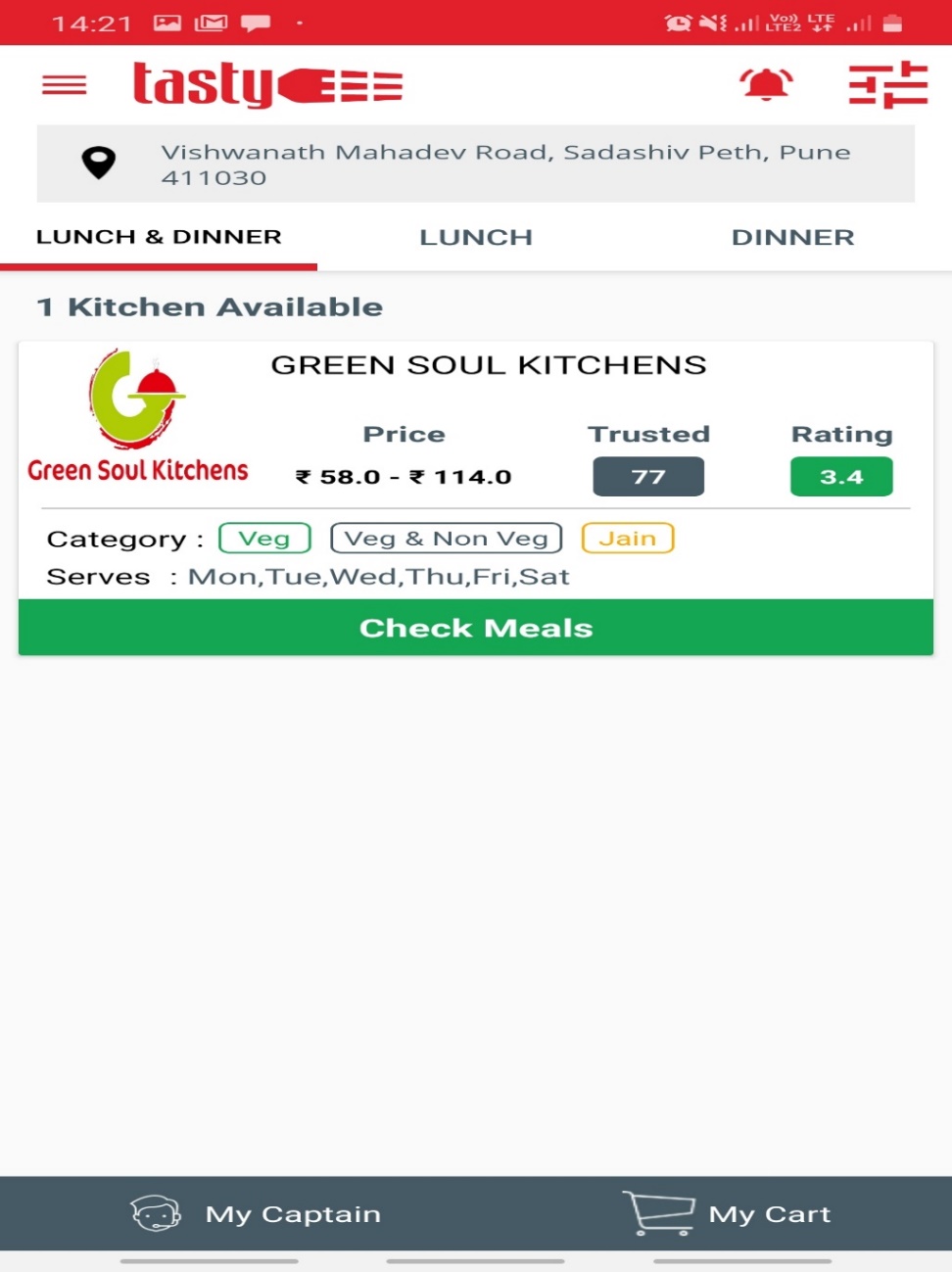
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| --- | --- |
| Process-1 | Find Customer Statistics |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Validate the collected Customer data |
|  | 2.Validate the found-out performance score |
|  | 3.Verify the best friends of the Customer |
|  | 4.Verify the Customer’s skills |
|  | 5.Verify all the non-basic Customer details |
|  | 6.Verify the extra details added |
|  | 7.Verify the best details |
|  | 8.Verify the use of social network |
|  | 9.Validate the downloaded photos and videos |
|  | 10.Veify the Customer’s fan following |

|  |  |
| --- | --- |
| Process-2 | Communicate Relevant Statistics |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Customers |
| Status | On-going |
| Role: | **As a** *user* |
| Verification Steps | 1.Verify the Customer’s basic details |
|  | 2.Validate the Customer’s statistics |
|  | 3.Verify the Customer’s social life |
|  | 4.Validate the miscellaneous details |
|  | 5.Verify the Customer’s behaviour |
|  | 6.Verify the Customer’s past |
|  | 7.Verify the Customer’s friends |
|  | 8.Verify the Customer’s controversies |
|  | 9. Verify the Customer’s crime record |
|  | 10.Validate the Customer’s relevant data |

|  |  |
| --- | --- |
| Objective-2 | Display Customer Statistics |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Customers |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Validate the created bar graph |
|  | 2. Validate the created pie graph |
|  | 3. Validate the created scatter graph |
|  | 4. Validate the created deviation graph |
|  | 5. Validate the created growth chart |
|  | 6.Verify the Customer’s downfalls |
|  | 7. Validate the Customer rankings |
|  | 8.Verify the Customer’s milestones |
|  | 9. Verify the Customer’s achievements |
|  | 10.Validate the miscellaneous data |

|  |  |
| --- | --- |
| Process-1 | Generate Statistical Graphs |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Validate the sorted Customer data |
|  | 2.Validate the appropriate library for graph plotting |
|  | 3.Validate the retrieved Customer data |
|  | 4.Validate the labelled Customer’s graphs |
|  | 5.Verify whether appropriate scale has been chosen |
|  | 6.Verify the use of correct colours |
|  | 7.Validate the plotted graphs |
|  | 8.Validate the Customer’s ranking |
|  | 9.Verify the variation in performance of the Customer |
|  | 10.Verify the Customer’s net worth graph |

|  |  |
| --- | --- |
| Process-2 | Choose Relevant Statistics |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Validate the sorted Customer data |
|  | 2. Verify that data segments ae prioritized |
|  | 3. Verify if it is shown in tabular form |
|  | 4. Verify if different categories of data are being made |
|  | 5. Verify whether data with anomalies is hidden |
|  | 6. Verify the links of Customers |
|  | 7. Verify that his friend’s profiles are shown |
|  | 8. Validate the updated statistics |
|  | 9. Verify that the highlights are shown |
|  | 10. Verify Statistics can be viewed |



# 6 VERIFICATION STEPS: GOAL-5

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| --- | --- |
| Objective-1 | Validate Customer Data |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Validate the basic Customer details |
|  | 2.Verify if the Customer data has been scaled from respected source |
|  | 3.Validate the details entered by the end user |
|  | 4.Verify whether all anomalies have been deleted |
|  | 5.Verify that data admin has been called to delete big mistakes |
|  | 6.Verify that each Customer category has been appended |
|  | 7.Verify that all Customers who are not playing are archived |
|  | 8.Verify that a good structure has been made |
|  | 9.Verify that database has been normalized |
|  | 10.Verify that unauthorized users are not able to access the database |

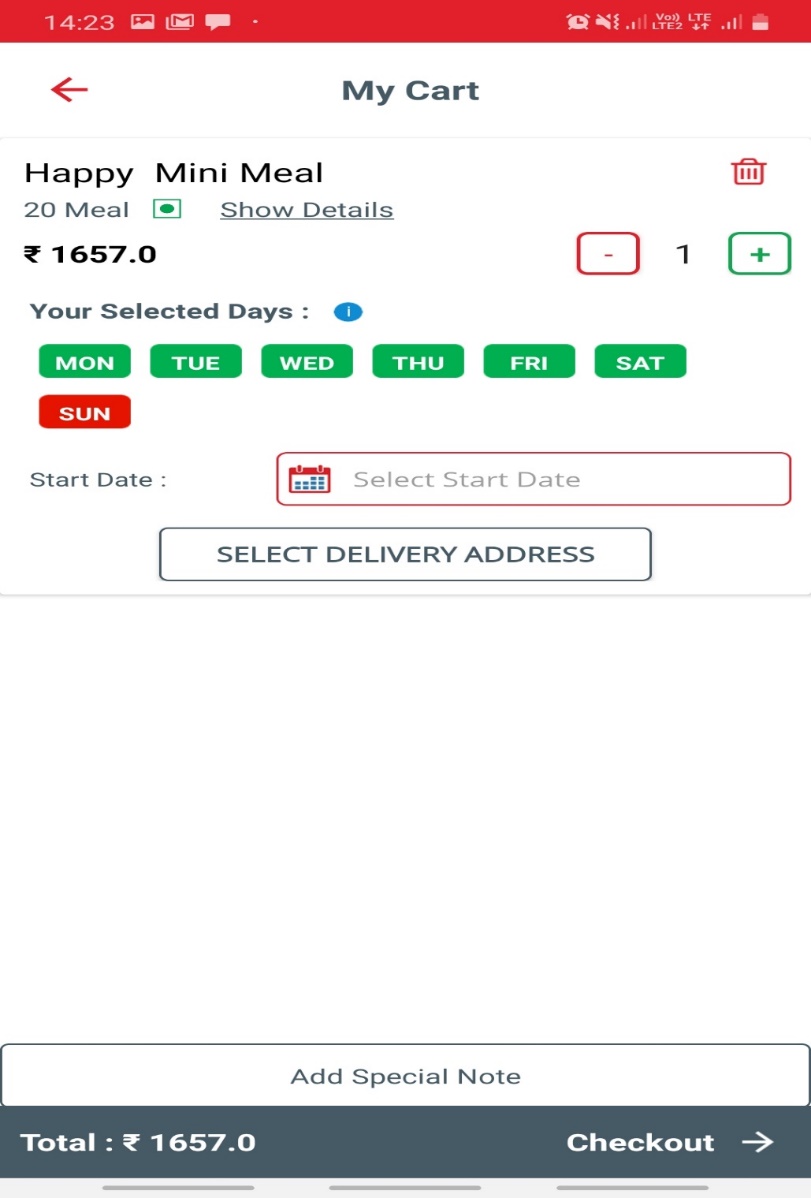
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| --- | --- |
| Process-1 | Fetch Customer Data |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Verify that data has been taken from end user |
|  | 2. Verify that data has been taken web scraping |
|  | 3. Validate data appended by admin |
|  | 4. Validate data from dataset repositories |
|  | 5. Validate the parsed data from different API |
|  | 6. Verify that ranking has been taken from FIFA officials |
|  | 7. Validate miscellaneous data from social networks |
|  | 8. Validate data from news |
|  | 9. Validate FIFA records |
|  | 10. Verify that a forum has been created |

|  |  |
| --- | --- |
| Process-2 | Feed Data Model |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Validate basic data in the main table |
|  | 2. Validate Customer data in different categories |
|  | 3. Validate the rankings inserted in the other table |
|  | 4. Validate the inserted links about the Customer |
|  | 5. Validate the photos and videos in the database |
|  | 6. Validate the updated data in database |
|  | 7. Validate statistics that affect prediction |
|  | 8. Verify the R square value for data model |
|  | 9. Validate confusion matrix for predicted values |
|  | 10. Verify the use of dimensional reductionist |

|  |  |
| --- | --- |
| Objective-2 | Generate Predicted Value |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Validate data used for prediction |
|  | 2. Validate the calculated R square data |
|  | 3. Validate the scaled data |
|  | 4. Validate the categorised data |
|  | 5. Verify that only good data has been used |
|  | 6. Validate the trained model |
|  | 7. Verify the use of different regression models |
|  | 8. Validate the predicted test values |
|  | 9. Validate the calculated confusion matrix |
|  | 10. Validate the graph with predicted values |

|  |  |
| --- | --- |
| Process 1 | Communicate Customer Value |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *User* |
| Verification Steps | 1. Verify that a new table has been created for values |
|  | 2. Validate the Customer details on the page |
|  | 3. Verify all terms asked by the Customer |
|  | 4. Verify the contract duration |
|  | 5. Validate all contract details of the Customer |
|  | 6. Validate the net worth of Customer |
|  | 7. Validate the base price of the Customer |
|  | 8. Validate the current price of the Customer |
|  | 9. Validate the predicted price of the Customer till the transfer window |
|  | 10. Validate other Customer data that is similar |

|  |  |
| --- | --- |
| Process 2 | Display Predicted Value |
| Purpose | Indicate purpose of the objective here in 3/4/ statements. |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *User* |
| Verification Steps | 1. Verify the GUI |
|  | 2. Validate all the Customer statistics |
|  | 3. Validate all the basic data of the Customer |
|  | 4. Validate all the Customer videos |
|  | 5. Validate all the values of the Customer |
|  | 6. Validate the Customer contract details |
|  | 7. Validate the similar Customer details |
|  | 8. Verify whether bidding market Is visible on the site |
|  | 9. Validate the transfer window dates |
|  | 10. Verify the transfer of Customer from one team to another |

**

# 3.7 VERIFICATION STEPS: GOAL-6

|  |  |
| --- | --- |
| Objective-1 | Generate feedback mechanism |
| Purpose | It is for taking a feedback from the user regarding the system. Help in determining if there are bugs or if any improvements can be made |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Verify the form created for feedback |
|  | 2.Verify the acquired user feedback |
|  | 3. Verify the accessed user feedback |
|  | 4. Verify the stored user feedback |
|  | 5.Verify the processed user feedback |
|  | 6.Verify the response given to the feedback |
|  | 7 Verify that necessary changes are applied |
|  | 8.Verify that system has been updated |
|  | 9.Verify the re-released software |
|  | 10.Verify that the feedback mechanism is in place |

|  |  |
| --- | --- |
| Process-1 | Access User Feedback |
| Purpose | It is for taking a feedback from the user regarding the system. Help in determining if there are bugs or if any improvements can be made |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1.Verify that feedback mechanism has been generated |
|  | 2.Verify that a form has been created |
|  | 3. Verify that feedback has been stored |
|  | 4. Verify that the feedback is valid |
|  | 5.Verify whether the feedback has been validated |
|  | 6.Verify that the feedback has been acquired |
|  | 7 Verify that necessary changes are applied in the feedback |
|  | 8.Verify and assess user feedback |
|  | 9.Verify the changes made in the feedback |
|  | 10.Verify that the system has been updated |

|  |  |
| --- | --- |
| Process-2 | Process User Feedback |
| Purpose | Helps to determine whether the feedback is genuine and if the changes are necessary to be made it helps in keeping the system updated |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Verify that a feedback mechanism has been generated |
|  | 2. Verify that a feedback form is created |
|  | 3. Verify that the feedback has been acquired |
|  | 4. Verify that feedback can be assessed |
|  | 5. verify that the feedback has been checked |
|  | 6. Verify whether the feedback is valid |
|  | 7. Verify whether changes have to made |
|  | 8. Verify that the changes have been finalised |
|  | 9. Verify whether the changes have been approved by the team |
|  | 10. Verify whether the feedback has been processed |

|  |  |
| --- | --- |
| Objective-2 | Apply Improvement Steps |
| Purpose | This will help to update the software with the right changes needed |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Verify that a feedback form is created |
|  | 2. Verify that the feedback has been acquired |
|  | 3. Verify that feedback can be assessed |
|  | 4. Verify that feedback has been processed |
|  | 5. verify that the response for the feedback has been generated |
|  | 6. Verify whether the changes have been analysed |
|  | 7. Verify that the changes have been finalised |
|  | 8. Verify whether the changes have been approved by the team |
|  | 9. Verify whether the changes have been made in system |
|  | 10. Verify whether the changes have been applied |

|  |  |
| --- | --- |
| Process-1 | Determine Feedback Response |
| Purpose | Know what is to be done with the feedback .If it is genuine changes are applied |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Verify that a feedback mechanism has been generated |
|  | 2. Verify that a feedback form is created |
|  | 3. Verify that the feedback has been acquired |
|  | 4. Verify whether feedback has been stored in database |
|  | 4. Verify that feedback can be assessed |
|  | 5. verify that the feedback has been checked |
|  | 6. Verify whether the feedback is valid |
|  | 7. Verify whether the feedback has been processed |
|  | 8. Verify what response has been made to the feedback |
|  | 9. Verify what changes have t be made if necessary |

|  |  |
| --- | --- |
| Process-2 | Aplply necessary changes |
| Purpose | Know what is to be done with the feedback .If it is genuine changes are applied |
| Target Audience | Stakeholders |
| Status | On-going |
| Role: | **As a** *developer* |
| Verification Steps | 1. Verify that a feedback mechanism has been generated |
|  | 2. Verify that the feedback has been acquired |
|  | 3. Verify whether the feedback is valid |
|  | 4. Verify whether the feedback has been processed |
|  | 4. Verify what response has been made to the feedback |
|  | 5. Verify what changes have t be made if necessary |
|  | 6. Verify whether the changes have been finalised |
|  | 8. Verify whether the changes have been approved by the team |
|  | 9. Verify whether the changes have been made in system |
|  | 10. Verify the software which is ready to release after making c=necessary changes |

# VERIFICATION MATRIX

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| User Story | Step-1 | Step-2 | Step-3 | Step-4 | Step-5 | Step-6 | Step-7 | Step-8 | Step-9 | Step-10 |
| G1:O1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G1:P1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G1:P2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G1:O2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G1:P1 | √ | √ | x | x | √ | x | √ | √ | √ | √ |
| G1:P2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G2:O1 | √ | √ | √ | √ | √ | √ | x | √ | √ | √ |
| G2:P1 | √ | √ | x | x | x | x | √ | √ | √ | √ |
| G2:P2 | √ | √ | √ | √ | √ | √ | √ | x | √ | √ |
| G2:O2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G2:P1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G2:P2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G3:O1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G3:P1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G3:P2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G3:O2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G3:P1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G3:P2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G4:O1 | √ | √ | √ | x | √ | √ | √ | √ | √ | √ |
| G4:P1 | √ | √ | √ | √ | √ | x | √ | √ | √ | √ |
| G4:P2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G4:O2 | √ | √ | √ | √ | √ | x | √ | √ | √ | √ |
| G4:P1 | √ | √ | √ | √ | √ | √ | √ | x | √ | √ |
| G4:P2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G5:O1 | x | x | x | √ | √ | √ | x | x | √ | √ |
| G5:P1 | √ | √ | x | x | x | √ | √ | √ | x | x |
| G5:P2 | √ | √ | √ | √ | x | x | x | x | x | x |
| G5:O2 | x | √ | √ | x | x | x | x | x | √ | √ |
| G5:P1 | √ | √ | √ | √ | √ | √ | √ | √ | x | x |
| G5:P2 | √ | √ | √ | √ | √ | √ | x | √ | √ | √ |
| G6:O1 | √ | √ | x | √ | √ | √ | √ | √ | √ | √ |
| G6:P1 | √ | √ | √ | √ | √ | √ | x | x | √ | √ |
| G6:P2 | √ | √ | √ | x | x | x | √ | √ | √ | √ |
| G6:O2 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| G6:P1 | √ | √ | √ | √ | √ | x | √ | √ | √ | x |
| G6:P2 | √ | √ | √ | x | √ | √ | √ | x | x | X |
| G7:O1 | X | X | X | X | X | X | X | X | X | X |
| G7:P1 | X | X | X | X | X | X | X | X | X | X |
| G7:P2 | X | X | X | X | X | X | X | X | X | X |
| G7:O2 | X | X | X | X | X | X | X | X | X | X |
| G7:P1 | X | X | X | X | X | X | X | X | X | X |
| G7:P2 | X | X | X | X | X | X | X | X | X | X |