**Document History**

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| **Use Case (UC)** | **URS**  **1** | **URS**  **2** | **URS**  **3** | **URS**  **4** | **URS**  **5** | **URS**  **6** | **URS**  **7** | **URS**  **8** | **URS**  **9** | **URS**  **10** | **URS**  **11** | **URS**  **12** | **URS**  **13** | **URS**  **14** | **URS**  **15** | **URS**  **16** | **URS**  **17** |
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| **Use Case (UC)** | **URS**  **18** | **URS**  **19** | **URS**  **20** | **URS**  **21** | **URS**  **22** | **URS**  **23** | **URS**  **24** |  |  |  |  |  |  |  |  |  |  |
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**Use Case and User Requirement Specification.**

# User Requirement Specification and Software Requirement Specification

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| **No.** | **URS Description** | **SRS**  **001** | **SRS**  **002** | **SRS**  **003** | **SRS**  **004** | **SRS**  **005** | **SRS**  **006** | **SRS**  **007** | **SRS**  **008** | **SRS**  **009** | **SRS**  **010** | **SRS**  **011** | **SRS**  **012** | **SRS**  **013** | **SRS**  **014** | **SRS**  **015** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **016** | **SRS**  **017** | **SRS**  **018** | **SRS**  **019** | **SRS**  **020** | **SRS**  **021** | **SRS**  **022** | **SRS**  **023** | **SRS**  **024** | **SRS**  **025** | **SRS**  **026** | **SRS**  **027** | **SRS**  **028** | **SRS**  **029** | **SRS**  **030** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **031** | **SRS**  **032** | **SRS**  **033** | **SRS**  **034** | **SRS**  **035** | **SRS**  **036** | **SRS**  **037** | **SRS**  **038** | **SRS**  **039** | **SRS**  **040** | **SRS**  **041** | **SRS**  **042** | **SRS**  **043** | **SRS**  **044** | **SRS**  **045** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **046** | **SRS**  **047** | **SRS**  **048** | **SRS**  **049** | **SRS**  **050** | **SRS**  **051** | **SRS**  **052** | **SRS**  **053** | **SRS**  **054** | **SRS**  **055** | **SRS**  **056** | **SRS**  **057** | **SRS**  **058** | **SRS**  **059** | **SRS**  **060** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **061** | **SRS**  **062** | **SRS**  **063** | **SRS**  **064** | **SRS**  **065** | **SRS**  **066** | **SRS**  **067** | **SRS**  **068** | **SRS**  **069** | **SRS**  **070** | **SRS**  **071** | **SRS**  **072** | **SRS**  **073** | **SRS**  **074** | **SRS**  **075** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **076** | **SRS**  **077** | **SRS**  **078** | **SRS**  **079** | **SRS**  **080** | **SRS**  **081** | **SRS**  **082** | **SRS**  **083** | **SRS**  **084** | **SRS**  **085** | **SRS**  **086** | **SRS**  **087** | **SRS**  **088** | **SRS**  **089** | **SRS**  **090** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **091** | **SRS**  **092** | **SRS**  **093** | **SRS**  **094** | **SRS**  **095** | **SRS**  **096** | **SRS**  **097** | **SRS**  **098** | **SRS**  **099** | **SRS**  **100** | **SRS**  **101** | **SRS**  **102** | **SRS**  **103** | **SRS**  **104** | **SRS**  **105** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **106** | **SRS**  **107** | **SRS**  **108** | **SRS**  **109** | **SRS**  **110** | **SRS**  **111** | **SRS**  **112** | **SRS**  **113** | **SRS**  **114** | **SRS**  **115** | **SRS**  **116** | **SRS**  **117** |
| 1 | The user can log in to a web application. |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Use can log out from a web application. |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | The nurse can enter patient info to the database server on a web application. |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Patient can view information of his on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Patient can edit information on profile page. |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Patient can change the password for login. |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Admin can manage user account on administrator page. |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Nutritionists can manage food on nutrition management page. |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Nurse or Doctor can manage activity on activity page. |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **001** | **SRS**  **002** | **SRS**  **003** | **SRS**  **004** | **SRS**  **005** | **SRS**  **006** | **SRS**  **007** | **SRS**  **008** | **SRS**  **009** | **SRS**  **010** | **SRS**  **011** | **SRS**  **012** | **SRS**  **013** | **SRS**  **014** | **SRS**  **015** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **016** | **SRS**  **017** | **SRS**  **018** | **SRS**  **019** | **SRS**  **020** | **SRS**  **021** | **SRS**  **022** | **SRS**  **023** | **SRS**  **024** | **SRS**  **025** | **SRS**  **026** | **SRS**  **027** | **SRS**  **028** | **SRS**  **029** | **SRS**  **030** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **031** | **SRS**  **032** | **SRS**  **033** | **SRS**  **034** | **SRS**  **035** | **SRS**  **036** | **SRS**  **037** | **SRS**  **038** | **SRS**  **039** | **SRS**  **040** | **SRS**  **041** | **SRS**  **042** | **SRS**  **043** | **SRS**  **044** | **SRS**  **045** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **046** | **SRS**  **047** | **SRS**  **048** | **SRS**  **049** | **SRS**  **050** | **SRS**  **051** | **SRS**  **052** | **SRS**  **053** | **SRS**  **054** | **SRS**  **055** | **SRS**  **056** | **SRS**  **057** | **SRS**  **058** | **SRS**  **059** | **SRS**  **060** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **061** | **SRS**  **062** | **SRS**  **063** | **SRS**  **064** | **SRS**  **065** | **SRS**  **066** | **SRS**  **067** | **SRS**  **068** | **SRS**  **069** | **SRS**  **070** | **SRS**  **071** | **SRS**  **072** | **SRS**  **073** | **SRS**  **074** | **SRS**  **075** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **076** | **SRS**  **077** | **SRS**  **078** | **SRS**  **079** | **SRS**  **080** | **SRS**  **081** | **SRS**  **082** | **SRS**  **083** | **SRS**  **084** | **SRS**  **085** | **SRS**  **086** | **SRS**  **087** | **SRS**  **088** | **SRS**  **089** | **SRS**  **090** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **091** | **SRS**  **092** | **SRS**  **093** | **SRS**  **094** | **SRS**  **095** | **SRS**  **096** | **SRS**  **097** | **SRS**  **098** | **SRS**  **099** | **SRS**  **100** | **SRS**  **101** | **SRS**  **102** | **SRS**  **103** | **SRS**  **104** | **SRS**  **105** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **106** | **SRS**  **107** | **SRS**  **108** | **SRS**  **109** | **SRS**  **110** | **SRS**  **111** | **SRS**  **112** | **SRS**  **113** | **SRS**  **114** | **SRS**  **115** | **SRS**  **116** | **SRS**  **117** |
| 10 | Patient can select the symptoms on health plan page. |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Patient can get the suggestion about exercise from the system. |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Patient can add food from the database to record in a health plan. |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Patient can view the average of glycemic index and calorie of food in the selected plan. |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Patient can delete a food from the health plan. |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Patient can record blood sugar value to the database. |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)). |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Patient can view the statistic line graph of blood sugar and body mass. |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **001** | **SRS**  **002** | **SRS**  **003** | **SRS**  **004** | **SRS**  **005** | **SRS**  **006** | **SRS**  **007** | **SRS**  **008** | **SRS**  **009** | **SRS**  **010** | **SRS**  **011** | **SRS**  **012** | **SRS**  **013** | **SRS**  **014** | **SRS**  **015** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **016** | **SRS**  **017** | **SRS**  **018** | **SRS**  **019** | **SRS**  **020** | **SRS**  **021** | **SRS**  **022** | **SRS**  **023** | **SRS**  **024** | **SRS**  **025** | **SRS**  **026** | **SRS**  **027** | **SRS**  **028** | **SRS**  **029** | **SRS**  **030** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **031** | **SRS**  **032** | **SRS**  **033** | **SRS**  **034** | **SRS**  **035** | **SRS**  **036** | **SRS**  **037** | **SRS**  **038** | **SRS**  **039** | **SRS**  **040** | **SRS**  **041** | **SRS**  **042** | **SRS**  **043** | **SRS**  **044** | **SRS**  **045** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **046** | **SRS**  **047** | **SRS**  **048** | **SRS**  **049** | **SRS**  **050** | **SRS**  **051** | **SRS**  **052** | **SRS**  **053** | **SRS**  **054** | **SRS**  **055** | **SRS**  **056** | **SRS**  **057** | **SRS**  **058** | **SRS**  **059** | **SRS**  **060** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **061** | **SRS**  **062** | **SRS**  **063** | **SRS**  **064** | **SRS**  **065** | **SRS**  **066** | **SRS**  **067** | **SRS**  **068** | **SRS**  **069** | **SRS**  **070** | **SRS**  **071** | **SRS**  **072** | **SRS**  **073** | **SRS**  **074** | **SRS**  **075** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **076** | **SRS**  **077** | **SRS**  **078** | **SRS**  **079** | **SRS**  **080** | **SRS**  **081** | **SRS**  **082** | **SRS**  **083** | **SRS**  **084** | **SRS**  **085** | **SRS**  **086** | **SRS**  **087** | **SRS**  **088** | **SRS**  **089** | **SRS**  **090** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **091** | **SRS**  **092** | **SRS**  **093** | **SRS**  **094** | **SRS**  **095** | **SRS**  **096** | **SRS**  **097** | **SRS**  **098** | **SRS**  **099** | **SRS**  **100** | **SRS**  **101** | **SRS**  **102** | **SRS**  **103** | **SRS**  **104** | **SRS**  **105** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **SRS**  **106** | **SRS**  **107** | **SRS**  **108** | **SRS**  **109** | **SRS**  **110** | **SRS**  **111** | **SRS**  **112** | **SRS**  **113** | **SRS**  **114** | **SRS**  **115** | **SRS**  **116** | **SRS**  **117** |
| 18 | Patient can view interpretation about blood sugar level from the system. |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Patient can select food name from the database. |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | Patient can check the list of medicine. |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Patient can get analyze of nutrition behavior in each day. |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | Patient can view the daily graph of the glycemic level. |  |  |  |  |  |  |  |  |  |  |  |  |

**Sequence diagram and User Requirement Specification**

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| **No.** | **Activity Diagram** | **URS**  **1** | **URS**  **2** | **URS**  **3** | **URS**  **4** | **URS**  **5** | **URS**  **6** | **URS**  **7** | **URS**  **8** | **URS**  **9** | **URS**  **10** | **URS**  **11** | **URS**  **12** | **URS**  **13** | **URS**  **14** | **URS**  **15** | **URS**  **16** |
| 1 | AD 01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | AD 02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | AD 03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | AD 04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | AD 05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | AD 06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | AD 07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | AD 08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | AD 09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | AD 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | AD 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | AD 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | AD 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | AD 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | AD 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | AD 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **Activity Diagram** | **URS**  **17** | **URS**  **18** | **URS**  **19** | **URS**  **20** | **URS**  **21** | **URS**  **22** |
| 17 | AD 17 |  |  |  |  |  |  |
| 18 | AD 18 |  |  |  |  |  |  |
| 19 | AD 19 |  |  |  |  |  |  |
| 20 | AD 22 |  |  |  |  |  |  |
| 21 | AD 21 |  |  |  |  |  |  |
| 22 | AD 22 |  |  |  |  |  |  |

**Sequence diagram and User Requirement Specification**

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| **No.** | **Sequence Diagram** | **URS 1** | **URS 2** | **URS 3** | **URS 4** | **URS 5** | **URS 6** | **URS 7** | **URS 8** | **URS 9** | **URS 10** | **URS 11** | **URS 12** | **URS 13** | **URS 14** |
| 1 | SD 01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | SD 02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | SD 03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | SD 04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | SD 05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | SD 06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | SD 07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | SD 08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | SD 09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | SD 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | SD 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | SD 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | SD 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | SD 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | SD 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | SD 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | SD 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **Sequence Diagram** | **URS 15** | **URS 16** | **URS 17** | **URS 18** | **URS 19** | **URS 20** | **URS 21** | **URS 22** |
| 18 | SD 18 |  |  |  |  |  |  |  |  |
| 19 | SD 19 |  |  |  |  |  |  |  |  |
| 20 | SD 20 |  |  |  |  |  |  |  |  |
| 21 | SD 21 |  |  |  |  |  |  |  |  |

**Use case diagram and Sequence diagram**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Sequence Diagram** | **UC 1** | **UC 2** | **UC 3** | **UC 4** | **UC 5** | **UC 6** | **UC 7** | **UC 8** | **UC 9** | **UC 10** | **UC 11** | **UC 12** | **UC 13** | **UC 14** |
| 1 | SD 01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | SD 02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | SD 03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | SD 04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | SD 05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | SD 06 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | SD 07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | SD 08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | SD 09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | SD 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | SD 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | SD 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | SD 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | SD 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | SD 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | SD 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | SD 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| **No.** | **Sequence Diagram** | **UC 15** | **UC 16** | **UC 17** | **UC 18** | **UC 19** | **UC 20** | **UC 21** | **UC 22** |
| 18 | SD 18 |  |  |  |  |  |  |  |  |
| 19 | SD 19 |  |  |  |  |  |  |  |  |
| 20 | SD 20 |  |  |  |  |  |  |  |  |
| 21 | SD 21 |  |  |  |  |  |  |  |  |

**User Requirement Specification and Software Testing (Unit test)**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **URS Description** | **UT-01** | **UT-02** | **UT-03** | **UT-04** | **UT-05** | **UT-06** | **UT-07** | **UT-08** | **UT-09** |
| 1 | User can request to register. |  |  |  |  |  |  |  |  |  |
| 2 | User can login to the system. |  |  |  |  |  |  |  |  |  |
| 3 | User can logout to the system. |  |  |  |  |  |  |  |  |  |
| 4 | User can edit user personal information. |  |  |  |  |  |  |  |  |  |
| 5 | User can Custom notification. |  |  |  |  |  |  |  |  |  |
| 6 | User can delete user information. (Admin) |  |  |  |  |  |  |  |  |  |
| 7 | User can Create financial plan. |  |  |  |  |  |  |  |  |  |
| 8 | User can Manage financial plan. |  |  |  |  |  |  |  |  |  |
| 9 | User can Custom limit category of expense. |  |  |  |  |  |  |  |  |  |
| 10 | User can View summary financial plan of the month. |  |  |  |  |  |  |  |  |  |
| 11 | User can Add daily expense/income. |  |  |  |  |  |  |  |  |  |
| 12 | User can Delete added expense/income. |  |  |  |  |  |  |  |  |  |
| 13 | User can View charts. |  |  |  |  |  |  |  |  |  |
| 14 | User can Search expense/income history. |  |  |  |  |  |  |  |  |  |
| 15 | User can Get financial report. |  |  |  |  |  |  |  |  |  |
| 16 | User can Send feedback. |  |  |  |  |  |  |  |  |  |
| 17 | User can View feedback. (Admin) |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **UT-10** | **UT-11** | **UT-12** | **UT-13** | **UT-14** | **UT-15** | **UT-16** | **UT-17** | **UT-18** |
| 1 | User can request to register. |  |  |  |  |  |  |  |  |  |
| 2 | User can login to the system. |  |  |  |  |  |  |  |  |  |
| 3 | User can logout to the system. |  |  |  |  |  |  |  |  |  |
| 4 | User can edit user personal information. |  |  |  |  |  |  |  |  |  |
| 5 | User can Custom notification. |  |  |  |  |  |  |  |  |  |
| 6 | User can delete user information. (Admin) |  |  |  |  |  |  |  |  |  |
| 7 | User can Create financial plan. |  |  |  |  |  |  |  |  |  |
| 8 | User can Manage financial plan. |  |  |  |  |  |  |  |  |  |
| 9 | User can Custom limit category of expense. |  |  |  |  |  |  |  |  |  |
| 10 | User can View summary financial plan of the month. |  |  |  |  |  |  |  |  |  |
| 11 | User can Add daily expense/income. |  |  |  |  |  |  |  |  |  |
| 12 | User can Delete added expense/income. |  |  |  |  |  |  |  |  |  |
| 13 | User can View charts. |  |  |  |  |  |  |  |  |  |
| 14 | User can Search expense/income history. |  |  |  |  |  |  |  |  |  |
| 15 | User can Get financial report. |  |  |  |  |  |  |  |  |  |
| 16 | User can Send feedback. |  |  |  |  |  |  |  |  |  |
| 17 | User can View feedback. (Admin) |  |  |  |  |  |  |  |  |  |

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| **No.** | **URS Description** | **UT-19** | **UT-20** | **UT-21** | **UT-22** | **UT-23** | **UT-24** | **UT-25** | **UT-26** | **UT-27** |
| 1 | User can request to register. |  |  |  |  |  |  |  |  |  |
| 2 | User can login to the system. |  |  |  |  |  |  |  |  |  |
| 3 | User can logout to the system. |  |  |  |  |  |  |  |  |  |
| 4 | User can edit user personal information. |  |  |  |  |  |  |  |  |  |
| 5 | User can Custom notification. |  |  |  |  |  |  |  |  |  |
| 6 | User can delete user information. (Admin) |  |  |  |  |  |  |  |  |  |
| 7 | User can Create financial plan. |  |  |  |  |  |  |  |  |  |
| 8 | User can Manage financial plan. |  |  |  |  |  |  |  |  |  |
| 9 | User can Custom limit category of expense. |  |  |  |  |  |  |  |  |  |
| 10 | User can View summary financial plan of the month. |  |  |  |  |  |  |  |  |  |
| 11 | User can Add daily expense/income. |  |  |  |  |  |  |  |  |  |
| 12 | User can Delete added expense/income. |  |  |  |  |  |  |  |  |  |
| 13 | User can View charts. |  |  |  |  |  |  |  |  |  |
| 14 | User can Search expense/income history. |  |  |  |  |  |  |  |  |  |
| 15 | User can Get financial report. |  |  |  |  |  |  |  |  |  |
| 16 | User can Send feedback. |  |  |  |  |  |  |  |  |  |
| 17 | User can View feedback. (Admin) |  |  |  |  |  |  |  |  |  |

# User & System Requirement Specification

**Feature#1: Authentication system.**

**URS-01: The user can log in to a web application.**

**Requirement**

SRS-01: The system shall provide the login UI to receive username and password.

SRS-02: The system shall provide button “login”.

SRS-03: The system shall validate username and password.

SRS-04: The system shall display error message “Invalid login attempt”, when user input wrong username and password

SRS-05: The system shall display error message the “Please input Username”, when the user does not input username.

SRS-06: The system shall display error message the “Please input Password”, when the user does not input password.

SRS-07: The system shall redirect to behavior page, when the patient login to the web application.

SRS-08: The system shall redirect to home page, when the doctor or nurse login to the web application.

SRS-09: The system shall redirect to administrator page, when admin login to the web application

**URS-02: The user can log out from web application.**

**Requirement**

SRS-10: The system shall provide button “Log out”.

SRS-11: The system shall redirect to home page.

**Feature#2: Account management.**

**URS-03: The nurse can be registration patient on a Web Application.**

**Requirement**

SRS-12: The system provides the register UI which includes input fields to input username, password, confirm Password, e-mail, first name, last name, a select box to select gender of patient, age, address, a select box to select diabetes type of patient, height, weight, and start treatment

SRS-13: The system shall provide button “Submit”.

SRS-14: The system shall redirect to home page, when nurse registers patient success.

SRS-15: The system shall validate input field username, password, confirm Password, e-mail, first name, last name, gender, age, address, diabetes type, height, weight, and start treatment.

SRS-16: The system shall provide error message the “email is already taken”, when the user input email is already in the database.

SRS-17: The system shall provide error message the “email is invalid”, when user input wrong format e-mail.

SRS-18: The system shall provide error message the “Username is already taken”, when the user input username is already in the database.

SRS-19: The system shall provide error message the “Username field is required”, when the user does not input username.

SRS-20: The system shall provide error message the “Password field is required”, when the user does not input password.

SRS-21: The system shall provide UI to user input again.

SRS-22: The system shall provide error message the “First Name field is required”, when the user does not input the first name.

SRS-21: The system shall provide UI to user input again.

SRS-23: The system shall provide error message the “Last Name field is required”, when user does not input the last name.

SRS-21: The system shall provide UI to user input again.

SRS-24: The system shall provide two select options male and female in the select box gender of the user.

SRS-25: The system shall provide error message the “Age field is required”, when the user does not input age.

SRS-26: The system shall provide error message “age is invalid”, when user input wrong format age.

SRS-21: The system shall provide UI to user input again.

SRS-27: The system shall provide error message the “Address field is required”, when the user does not input address.

SRS-21: The system shall provide UI to user input again.

SRS-28: The system shall provide two select options diabetes type 1 and diabetes type 2 in the select box diabetes type of user.

SRS-29: The system shall provide error message “height is invalid”, when user input wrong format height.

SRS-30: The system shall provide error message the “Height field” is required, when the user does not input height.

SRS-21: The system shall provide UI to user input again.

SRS-31: The system shall provide error message “weight is invalid”, when user wrong input format weight.

SRS-32: The system shall provide error message the “Weight field” is required, when the user does not input weight.

SRS-21: The system shall provide UI to user input again.

SRS-33: The system shall provide error message the “Start Treatment field” is required. When the user does not input, start treatment.

SRS-21: The system shall provide UI to user input again.

SRS-34: The system shall save user information to database, when user input data success.

SRS-35: The system shall redirect to home page, when registration is a success.

**URS-04: The patient can view information of his on profile page.**

**Requirement**

SRS-36: The system shall provide link redirect to profile page.

SRS-37: The system shall redirect to the profile page.

SRS-38: The system shall display the information of the user.

**URS-05: The patient can edit information on the profile page.**

**Requirement**

SRS-39: The system shall provide UI, which includes input fields to input username, password, confirm Password, e-mail, first name, last name, a select box to choose gender, age, address, a select box to select diabetes type, height, weight, and start treatment for edit patient info.

SRS-13: The system shall provide button “Submit”.

SRS-40: The system shall redirect to a profile page, when patient edit information success.

SRS-40: The system shall validate input field Username, Password, Confirm Password, E-mail, First Name, Last Name, Gender, Age, Address, Diabetes Type, Height, Weight, Start treatment

SRS-41: The system shall provide error message “e-mail is invalid”, when user input wrong format phone number.

SRS-42: The system shall provide error message “age is invalid”, when user input wrong format age.

SRS-43: The system shall provide error message “height is invalid”, when user input wrong format height.

SRS-44: The system shall provide error message “Weight is invalid”, when user wrong input format weight.

SRS-45: The system shall save change in the database.

**URS-06: The patient can change the password for login.**

**Requirement**

SRS-46: The system shall provide input fields to current input password, new password, confirm the password.

SRS-13: The system shall provide button “Submit”.

SRS-47: The system shall redirect to the profile page, when user change password success.

SRS-48: The system shall validate the input fields current password, new password, confirm the password.

SRS-49: The system shall provide error massage “current password is field”, when the current password not correct.

SRS-50: The system shall provide error massage “new password is field”, when new password not same confirm the password.

SRS-51: The system shall provide error massage “new password and confirm password does not match”, when user input a new password and confirm password does not match.

**URS-07: Admin can manage the account on administrator page.**

**Requirement**

SRS-52: The system shall provide UI to create new account include input fields to input username, password, first name, last name, and selection box to select the role of the user.

SRS-53: The system shall provide three select options doctor, nurse, and nutritionists in the select role of the user.

SRS-13: The system shall provide “Submit” button.

SRS-54: The system shall save data in the database, when admin click button “Submit”.

SRS-55: The system shall redirect to the home page of account management, when admin creates new account success.

SRS-56: The system shall provide UI to edit include input fields to input username, password, first name, last name, and selection box to select the role of the user.

SRS-53: The system shall provide three select options doctor, nurse, and nutritionists in the select role of the user.

SRS-13: The system shall provide “Submit” button.

SRS-57: The system shall save change data in the database, when admin click button “Submit”.

SRS-58: The system shall redirect to a home page of account management, when edit accounts success.

SRS-59: The system shall provide “Delete” button.

SRS-60: The system shall delete the account from the database, when admin click button “Delete”.

**Feature#3: Nutrition management.**

**URS-08: Nutritionists can manage food on nutrition management page.**

**Requirement**

SRS-59: The system shall provide UI to create new foods which include input field to input food name, glycemic index, and calorie.

SRS-60: The system shall validate input field food name, glycemic index, and calorie.

SRS-61: The system shall provide error message “glycemic index is invalid”, when user wrong input format.

SRS-62: The system shall provide error message “calorie is invalid”, when user wrong input format.

SRS-13: The system shall provide “Submit” button.

SRS-63: The system shall save data in the database, when nutritionists click button “Submit”.

SRS-64: The system shall redirect to the home page of nutrition management, when to create new foods success.

SRS-65: The system shall provide UI to edit include input field to input food name, glycemic index, and calorie.

SRS-60: The system shall provide error message “glycemic index is invalid”, when user wrong input format.

SRS-61: The system shall provide error message “calorie is invalid”, when user wrong input format.

SRS-13: The system shall provide “Submit” button.

SRS-66: The system shall save change data in the database, when nutritionists click button “Submit”.

SRS-67: The system shall redirect to the home page of nutrition management, when to edit food success.

SRS-59: The system shall provide “Delete” button.

SRS-68: The system shall delete foods from the database, when nutritionists click button “Delete”.

**Feature#4: Activity management**.

**URS-09: Nurse or Doctor can manage activity on activity management page.**

**Requirement**

SRS-69: The system shall provide UI to create the new activity which includes input field patient symptom and exercise advice to a database.

SRS-13: The system shall provide “Submit” button.

SRS-70: The system shall save data in the database, when nurse/doctor clicks button “Submit”.

SRS-71: The system shall redirect to a home page of activity management, when to create new activity success.

SRS-72: The system shall provide UI to edit the data include input field patient symptom and exercise advice to a database.

SRS-13: The system shall provide “Submit” button.

SRS-73: The system shall save change data in the database, when nurse/doctor click button “Submit”.

SRS-74: The system shall redirect to the home page of activity management, when editing activity success.

SRS-59: The system shall provide “Delete” button.

SRS-75: The system shall delete an activity from the database, when nurse/doctor click button “Delete”.

**Feature#5: Activity plan and recommend system**.

**URS-10: The patient can select the symptoms on health plan page.**

**Requirement**

SRS-76: The system shall provide a select box to select symptoms of the patient.

SRS-77: The system shall provide five select option ที่มีปัญหาข้อเข่า ข้อเท้าหรือเท้า, ผู้ที่เป็นปลายประสาทอักเสบ มีอาการชาเท้า, ผู้ที่เบาหวานขึ้นตา, ผู้ที่มีโรคหัวใจ in the select box symptoms of patient.

SRS-78: The system shall provide “select” button.

**URS-11: The patient can get the suggestion about exercise from a system.**

**Requirement**

SRS-79: The system shall provide information which includes symptom detail, exercise appropriate, exercise inappropriate, and steps of exercise, when patient select the symptoms success.

**Feature#6: Nutrition plan system.**

**URS-12: The patient can select food from the database to record in the health plan.**

**Requirement**

SRS-80: The system shall provide a select box to select food name from the database.

SRS-81: The system shall provide select options list of food name.

SRS-82: The system shall provide “Add” button.

SRS-83: The system shall remember the food that selected to the database of user food.

SRS-84: The system shall review food to the user, when success process.

**URS-13:** **The patient can view the average of glycemic index and calorie of food in the selected plan.**

**Requirement**

SRS-85: The system shall provide text number of an average glycemic index.

SRS-86: The system shall provide text number of average calorie.

**URS-14: The patient can delete the food from the health plan.**

**Requirement**

SRS-87: The system shall provide a button to “delete” food from the list.

SRS-89: The system shall delete a food from the list of the health plan.

SRS-90: The system shall save change in the database of user food.

**Feature#7: Health monitors system.**

**URS-15: The patient can record blood sugar value to the database.**

**Requirement**

SRS-91: The system shall provide input field to input blood sugar.

SRS-92: The system shall provide button “add” to a user.

SRS-93: The system shall record the value in the database.

SRS-94: The system shall validate input field blood sugar.

SRS-95: The system shall provide error message “blood sugar is invalid”, when the user input wrong format blood sugar.

SRS-96: The system shall provide error message “blood sugar cannot be negative”, when the user input blood sugar minus value.

**URS-16: Patient can view body mass value that calculated by using BMI = weight (Kg) / (height (m) \* height (m)).**

**Requirement**

SRS-97: The system shall calculate body mass from information (weight, height) of patientby using BMI = weight (Kg) / (height (m) \* height (m)).

SRS-98: The system shall display body mass (BMI, BMR) on health plan page.

**URS-17: The patient can view the statistic line graph of blood sugar and body mass.**

**Requirement**

SRS-99: The system shall provide line graph.

SRS-100: The system shall request blood sugar value and BMI value from the database.

SRS-101: The system shall display blood sugar value and BMI value in the graph.

**URS-18: The patient can view interpretation about blood sugar level from the system.**

**Requirement**

SRS-102: The system shall provide UI for display recommend to the user include (levels of diabetes, Symptom, How to take care).

SRS-103: The system shall request the blood sugar value to analyze and find the levels of diabetes.

SRS-104: The system shall display the levels of diabetes and symptom and how to take care.

**Feature#8: Behavior monitors system.**

**URS-19: The patient can select food name from the database.**

**Requirement**

SRS-80: The system shall provide a select box to select food name from the database.

SRS-81: The system shall provide select options list of food name.

SRS-105: The system shall provide “select” button.

SRS-106: The system shall review food that selected to the user.

**URS-20: The patient can check the list of medicine.**

**Requirement**

SRS-107: The system shall provide a checkbox to check the list of medicine.

**URS-21: The patient can get analyze of nutrition behavior in each day.**

**Requirement**

SRS-108: The system shall provide image color to display result analyze.

SRS-109: The system shall provide three colors which include green, yellow, and red.

SRS-110: The system shall request data of food and medicine in each day to analyze.

SRS-111: The system shall display analyze result green color, when the user gets glycemic index value less than 120 and check all list of medicine.

SRS-112: The system shall display analyze result yellow color, when the user gets glycemic index value more than 120 and check all list of medicine or get glycemic index value less than 120 and not check all list of medicine.

SRS-113: The system shall display analyze result red color, when the user gets glycemic index value more than 120 and not check all list of medicine.

**URS-22: The patient can view the daily graph of the glycemic level.**

**Requirement**

SRS-114: The system shall provide line graph.

SRS-115: The system shall get glycemic index value from foods that selected.

SRS-116: The system shall calculate the glycemic index value.

SRS-117: The system shall display the glycemic value of foods that calculated on the graph.