1. **Work Breakdown Structure (WBS)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Level | WBS Code | Name of the WBS Element | Work Description | Project Deliverables | Budget  ($ ) | Resources |
| **WBS\_001** | **WBS\_001\_001** | **Register new User** |  |  |  | **Stanley** |
|  | WBS\_001\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_001\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_001\_001-003 | testing | Implement Junit and Mockito for testing | Delivering tested function | 1MD |  |
| **WBS\_001** | **WBS\_001\_002** | **login** |  |  |  | **Yee Mon** |
|  | WBS\_001\_002-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_001\_002-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_001\_002-003 | testing | Implement Junit and Mockito for testing | Delivering tested function | 1MD |  |
| **WBS\_001** | **WBS\_001\_003** | **forget password** |  |  |  | **Stanley** |
|  | WBS\_001\_003-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_001\_003-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_001\_003-003 | testing | Implement Junit and Mockito for testing | Delivering tested function | 1MD |  |
| **Wbs\_001** | **WBS\_001\_004** | **remove user from database** |  |  |  | **Stanley** |
|  | WBS\_001\_004-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_001\_004-002 | Implement backend | Create controller, service, repository | Delivering backend service | 1MD |  |
|  | WBS\_001\_004-003 | testing | Implement Junit and Mockito for testing | Delivering tested function | 1MD |  |
| **WBS\_012** | **WBS\_012\_001** | **ADMIN** |  |  |  | **Bek** |
|  | WBS\_012\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_012\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_012\_001-003 | testing | Implement Junit and Mockito for testing | Delivering tested function | 1MD |  |
|  |  |  |  |  |  |  |
| **Wbs\_001** | **WBS\_001\_005** | **password security** |  |  |  | **Yee Mon** |
|  | WBS\_001\_005-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_001\_005-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_001\_005-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| **WBS\_002** | **WBS\_002\_001** | **Register new vendor** |  |  |  | **Yee Mon** |
|  | WBS\_002\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_002\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_002\_001-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| **WBS\_002** | **WBS\_002\_002** | **login** |  |  |  | **Yee Mon** |
|  | WBS\_002\_002-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_002\_002-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_002\_002-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| **WBS\_002** | **WBS\_002\_003** | **forget password** |  |  |  | **Stanley** |
|  | WBS\_002\_003-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_002\_003-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_002\_003-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| **WBS\_003** | **WBS\_003\_001** | **general search** |  |  |  | **Bek** |
|  | WBS\_003\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_003\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_003\_001-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| **WBS\_003** | **WBS\_003\_002** | **advanced search** |  |  |  | **BEK** |
|  | WBS\_003\_002-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_003\_002-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_003\_002-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_004 | WBS\_004\_001 | add product to database |  |  |  | Jean |
|  | WBS\_004\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_004\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_004\_001-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_004 | WBS\_004\_002 | remove product from database |  |  |  | Jean |
|  | WBS\_004\_002-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_004\_002-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_004\_002-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_004 | WBS\_004\_003 | update product to database |  |  |  | Jean |
|  | WBS\_004\_003-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_004\_003-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_004\_003-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_004 | WBS\_004\_004 | backup the product catalog periodically and store locally |  |  |  | Niveen |
|  | WBS\_004\_004-001 | Modify Admin UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_004\_004-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_004\_004-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_005 | WBS\_005\_001 | add product category to database |  |  |  | Niveen |
|  | WBS\_005\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_005\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_005\_001-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_005 | WBS\_005\_002 | remove product category from database |  |  |  | Niveen |
|  | WBS\_005\_002-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_005\_002-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_005\_002-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| **WBS\_006** | **WBS\_006\_001** | **View Cart** | **View cart detail UI** |  |  | **Yee Mon** |
|  | WBS\_006\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_006\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_006\_001-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
|  | **WBS\_006\_002** | **Add CART** | **Add an item to the cart** |  |  | **Yee Mon** |
|  | WBS\_006\_002-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_006\_002-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_006\_002-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
|  | **WBS-006-003** | **Remove** | **Remove item from the cart** |  |  | **Yee Mon** |
|  | WBS\_006\_003-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_006\_003-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_006\_003-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
|  | **WBS-006-004** | **Edit** | **Edit cart quantity** |  |  | **Stanley** |
|  | WBS\_006\_004-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_006\_004-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_006\_004-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
|  | **WBS-006-005** | **Checkout cart** | **checkout the cart** |  |  | **Yee Mon** |
|  | WBS\_006\_005-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_006\_005-002 | Implement backend / Send Email | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_006\_005-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_007 | wbs\_007\_001 | process order UI |  |  |  | Jean |
|  | WBS\_007\_001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_007\_001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_007\_001-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
|  |  | integrate with module 10 | integrate with module 10 | integrated with module 10 | 1MD |  |
|  | wbs\_007\_002 | testing | sys app & integration testing | tested module | 1MD |  |
| WBS\_008 | wbs\_008\_001 | mock payment gateway | mock payment gateway | mock payment gateway |  | Bon |
|  | wbs\_008\_002 | integrate with module 7 | integrate with module 7 | integrated with module 7 | 1MD | Bon |
|  | wbs\_008\_003 | testing | sys app & integration testing | tested module | 1MD |  |
| WBS\_009 | wbs\_009\_001 | weekly report |  |  |  | Bon |
|  | wbs\_009\_001\_001 | Sales by Product Category | Sales by Product Category |  |  |  |
|  | WBS\_009\_001-001-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_009\_001-001-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_009\_001-001-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_009 | WBS\_009\_001\_002 | Sales by Product | Sales by Product |  |  | Bon |
|  | WBS\_009\_001-002-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_009\_001-002-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_009\_001-002-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
| WBS\_009 | wbs\_009\_001\_003 | overall Sales | overall Sales |  |  | Bon |
|  | WBS\_009\_001-003-001 | Design UI | Prepare UI Elements | Delivering UI Interface | 1MD |  |
|  | WBS\_009\_001-003-002 | Implement backend | Create controller, service, repository and validation | Delivering backend service | 1MD |  |
|  | WBS\_009\_001-003-003 | testing | Implement Junit and for testing | Delivering tested function | 1MD |  |
|  | wbs\_009\_001\_004 | testing | sys app testing | tested func |  |  |
| WBS-009 | wbs\_009\_002 | monthly report |  |  | 1MD | Bon |
|  | wbs\_009\_002\_01 | Sales by Product Category | Sales by Product Category | Sales by Product Category func |  |  |
|  | wbs\_009\_002\_02 | Sales by Product | Sales by Product | Sales by Product func |  |  |
|  | wbs\_009\_002\_03 | overall Sales | overall Sales | overall Sales func |  |  |
|  | wbs\_009\_002\_04 | testing | sys app testing | tested func |  |  |
| WBS-009 | wbs\_009\_003 | quarterly report |  |  | 1MD | Bon |
|  | wbs\_009\_003\_01 | Sales by Product Category | Sales by Product Category | Sales by Product Category func |  |  |
|  | wbs\_009\_003\_02 | Sales by Product | Sales by Product | Sales by Product func |  |  |
|  | wbs\_009\_003\_03 | overall Sales | overall Sales | overall Sales func |  |  |
|  | wbs\_009\_003\_04 | testing | sys app testing | tested func |  |  |
| WBW-009 | wbs\_009\_004 | half year report |  |  | 1MD | Bon |
|  | wbs\_009\_004\_01 | Sales by Product Category | Sales by Product Category | Sales by Product Category func |  |  |
|  | wbs\_009\_004\_02 | Sales by Product | Sales by Product | Sales by Product func |  |  |
|  | wbs\_009\_004\_03 | overall Sales | overall Sales | overall Sales func |  |  |
|  | wbs\_009\_004\_04 | testing | sys app testing | tested func |  |  |
| WBS-009 | wbs\_009\_005 | annually report |  |  | 1MD | Bon |
|  | wbs\_009\_005\_01 | Sales by Product Category | Sales by Product Category | Sales by Product Category func |  |  |
|  | wbs\_009\_005\_02 | Sales by Product | Sales by Product | Sales by Product func |  |  |
|  | wbs\_009\_005\_03 | overall Sales | overall Sales | overall Sales func |  |  |
|  | wbs\_009\_005\_04 | testing | sys app testing | tested func |  |  |
| WBS-009 | wbs\_009\_006 | ad-hoc report |  |  | 1MD | Bon |
|  | wbs\_009\_006\_01 | Sales by Product Category | Sales by Product Category | Sales by Product Category func |  |  |
|  | wbs\_009\_006\_02 | Sales by Product | Sales by Product | Sales by Product func |  |  |
|  | wbs\_009\_006\_03 | overall Sales | overall Sales | overall Sales func |  |  |
|  | wbs\_009\_006\_04 | testing | sys app testing | tested func |  |  |
| **wbs\_010** | **wbs\_010\_001** | **email func** | **email func** | **email func** | **2MD** | **Stanley** |
| **wbs\_011** | **wbs\_011\_001** | **entity model** | **entity model** | **entity model** | **2MD** | **All team** |
|  |  |  |  |  | 92MD |  |

1. Roles and Responsibilities:

|  |  |  |
| --- | --- | --- |
| Name | Role | Responsibilities |
| Bon | Team Lead & Developer | Responsible for the successful delivery of projects carried out by the team  Monitor and control the project progress to ensure quality  Design and write code based on Functional Specifications  Unit Testing  Incident and bug fixing  QA Testing |
| Bek – Ulugbek Kucharov | Developer | Design and write code based on Functional Specifications  Unit Testing  Incident and bug fixing |
| Niveen Abdelaatty | Developer &  QA Controller | Design and write code based on Functional Specifications  Unit Testing  Incident and bug fixing  QA Testing  Monitor and control QA activity |
| Yee Mon Zaw | Developer | Design and write code based on Functional Specifications  Unit Testing  Incident and bug fixing  QA Testing |
| Chrisner | Developer | Design and write code based on Functional Specifications  Unit Testing  Incident and bug fixing  QA Testing |
| Stanley Julien | Developer | Design and write code based on Functional Specifications  Unit Testing  Incident and bug fixing  QA Testing |

1. **History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S/No | Description | Version Number | Date | Remarks |
| 1 | Initial version | 0.1 | 17-Apr-19 | Created first draft version |
| 2 | Updated Roles and Responsibility | 0.2 | 20-Apr-19 | Updated Roles and Responsibility |
| 3 | Update WBS table | 0.3 | 25-Apr-2019 | Update resource column in WBS table |
|  |  |  |  |  |
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