

Operational Concept Description

< Flowerseeker >

< Team04>

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Version History

| Date | Author | Version | Changes made | Rationale |
|-------------|----------|---------|--|---|
| 10/02/2014 | Chenghao | 1.0 | <ul style="list-style-type: none"> • Add section 1, section 2 | <ul style="list-style-type: none"> • Initial draft for FlowerSeeker system |
| 10/06/2014 | Chenghao | 1.1 | <ul style="list-style-type: none"> • Modify section 2.1, add section 3.1, section 3.2 | <ul style="list-style-type: none"> • Modify mistakes in section 2.1 involving benefit chain, analyze current FlowerSeeker system |
| 10/09/2014 | Chenghao | 2.0 | <ul style="list-style-type: none"> • Add section 3.3, section 3.4 | <ul style="list-style-type: none"> • Finish all sections |
| 10/17/2014 | Chenghao | 2.1 | <ul style="list-style-type: none"> • Change the section 2.1, section 3.2 | <ul style="list-style-type: none"> • Correcting the benefit chains and level of service goals |
| 11/26/2014 | Chenghao | 2.2 | <ul style="list-style-type: none"> • Change the section 2.3, section 3.2.1, section 3.3.1 | <ul style="list-style-type: none"> • Complementing the System Boundary. Explaining the tracking part more concretely |
| 12/16/2014 | Chenghao | 3.1 | <ul style="list-style-type: none"> • Change the section 2.1 and section 3.3.1 | <ul style="list-style-type: none"> • Modifying the benefit chain and Element Relationship Diagram |
| 02 /11/2015 | Chenghao | 3.2 | <ul style="list-style-type: none"> • Change the section 3.2.1 | <ul style="list-style-type: none"> • Modifying the capability goals |
| 04/20/2015 | Chenghao | 4.0 | <ul style="list-style-type: none"> • Change the section 3.2.1 | <ul style="list-style-type: none"> • Delete the OC-10 and OC-11 |

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1. Introduction

1.1 Purpose of the OCD

This document provides, in detail, the shared visions and goals of the stakeholders of the Flowerseeker for Jessica Lee. The success-critical stakeholders of the project are Jessica Lee, as the project owner; the florists and online retailers, as end users; our team members including on campers students and cliff as the maintainer and developer.

1.2 Status of the OCD

The status of the OCD is currently at the version 2.0 by adding section 3.3 and section 3.4. The scope and function of the Flowerseeker System have been adjusted to satisfy the requirements provided.

2. Shared Vision

Table 1: The Program Model

| Assumptions <ul style="list-style-type: none"> • Customers want to build relationship with local florists. • Customers want a more convenient way to purchase flowers online and have a better shopping experience. • The elderly and/or non-technical florists can/want to use online shopping system and have online presence. | | | |
|--|--|---|---|
| Stakeholders | Initiatives | Value Propositions | Beneficiaries |
| <ul style="list-style-type: none"> • Developers • Maintainers • Users (Customers and Florists) • Acquirers (Client) | <ul style="list-style-type: none"> • Design and Develop the system • Survey flower shop customers/retailers to get Voice of Customers • Create instructions for florists and customers on how to use the system • Market to the florists and customers | <ul style="list-style-type: none"> • Allow customers to buy directly from their preferred florists to build relationship with florists • Increase customers' shopping experience • Help customers save time by purchasing flowers from the nearby florists. • Help florists advertise their business/flower online • Help florists save cost on third party platform | <ul style="list-style-type: none"> • Customers • Florists |
| Cost <ul style="list-style-type: none"> • COTS for payment system • Hardware (server) • Web Hosting Server • Marketing cost • Maintenance | | Benefits <ul style="list-style-type: none"> • Decreased time to purchase flowers • Increased registered users (customers/florists) • Increased in number of transactions | |

2.1 Benefits Chain

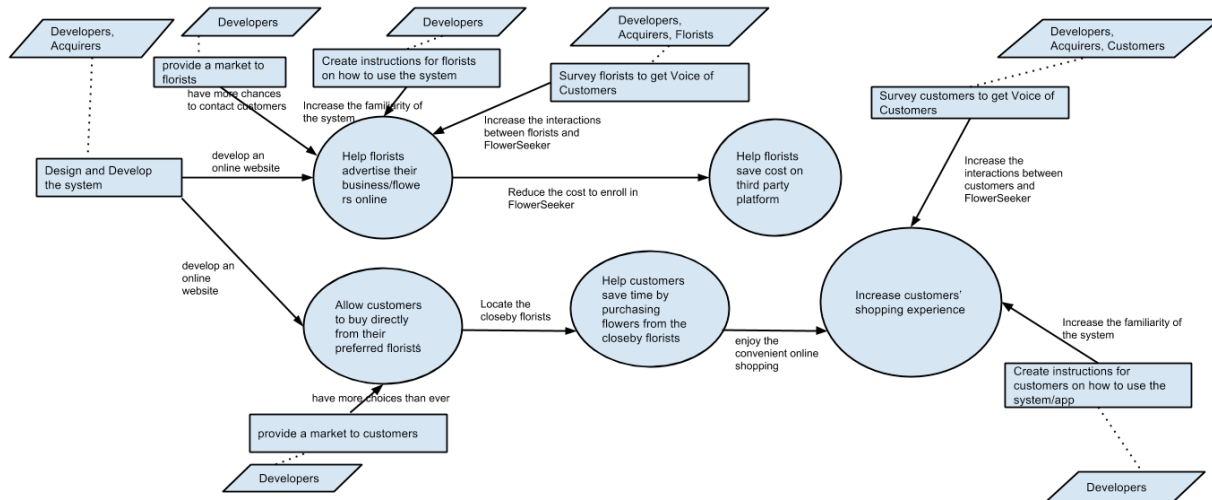


Figure 1: Benefits Chain Diagram of Flowerseeker

2.2 System Capability Description

- The type of system to be built: Web.
- The target customer(s) for the system: Florists who are willing to have an online presence and people who are willing to purchase flowers online.
- The need or opportunity that will be satisfied by the system: Having a better user experience and making the process of flowers transaction more convenient.
- A compelling reason for the customer to buy/use the system: By using this system, customers would have more choices and save more time and money to buy flowers. And florists will save cost to advertise their products.
- The closest competitors of the system: FTD, 1-800-Flowers and Bloom Nation.
- The system's primary differentiation from, or benefit over, the closest competitor or alternative approach: Reducing the subscription cost for florists to join the network and allowing customers communicate directly with local florists.

2.3 System Boundary and Environment

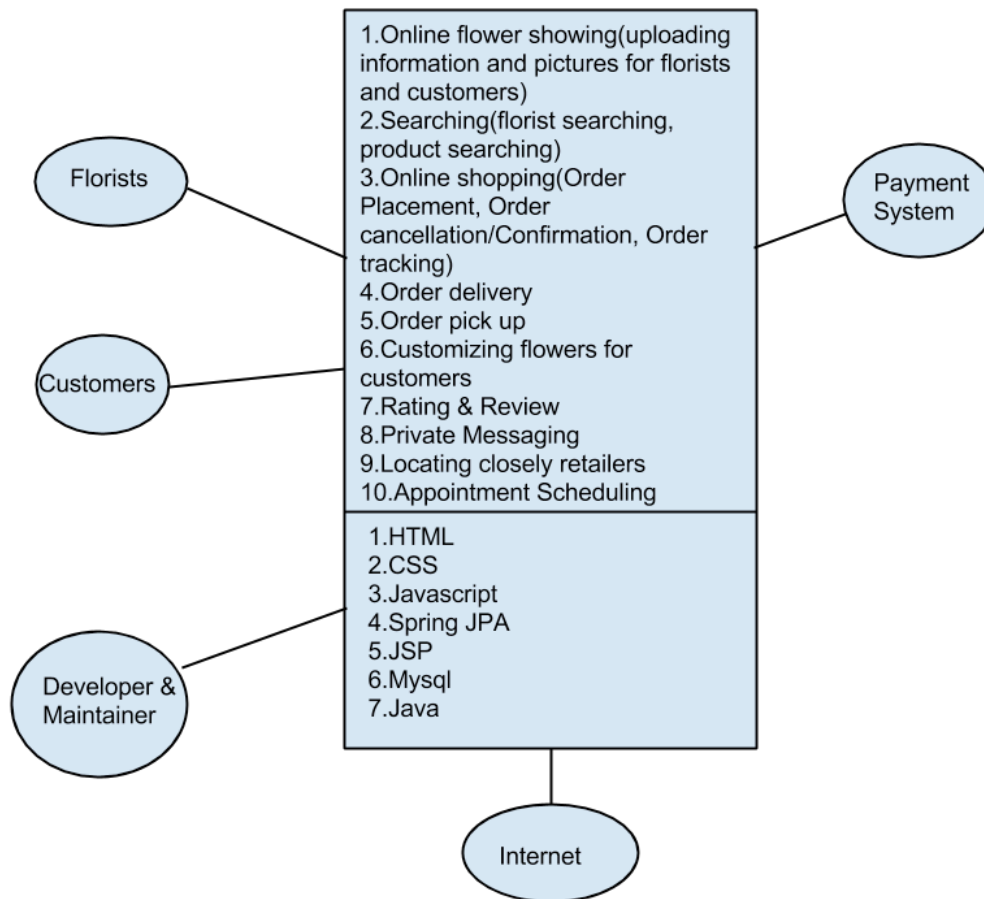


Figure 2: System Boundary and Environment Diagram of FlowerSeeker

3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

The current FlowerSeeker system was built by the team of 577 class in the last year. For the current system, it has a relatively complete back end and the fundamental front end. They use the Twitter Bootstrap to develop the front end and use the Tomcat as server to provide services. And the current system uses the Mysql as database to record and retrieve information about florists, customers and flowers. However, the current system lacks relative API about implementing the function of payment and locating the closely florists.

3.1.2 Artifacts

The current system has finished some work about the back end.

1. The current system uses MySQL as database to store the information about florists, customers and flowers. And the schema and relative SQL have already been completed.
2. The current system has completed the workflow for the payment. However they do not complete the work of developing relative payment API.
3. The current system uses Tomcat as web server to provide relative services.
4. Website Template: The current system has a fundamental frontend template that has been used to connect the back end of current system.

3.1.3 Current Business Workflow

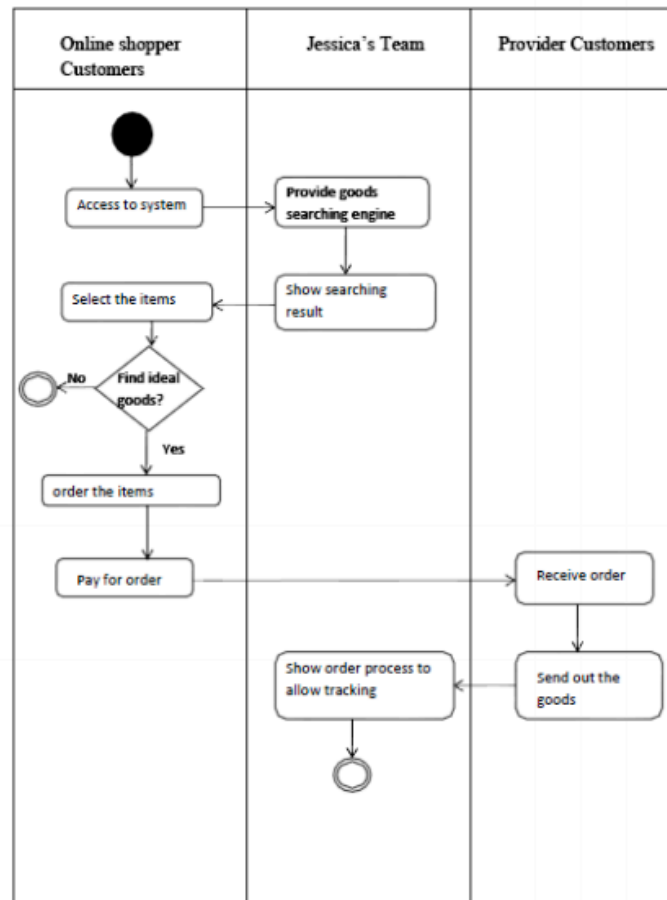


Figure 3: Current System of FlowerSeeker

3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

| Capability Goals | Priority Level |
|---|----------------|
| OC-1:Order Placement: The system allows customers to drag the flowers they choose into the shopping cart and delete the flowers from the shopping cart. | Must have |
| OC-2: Managing Florist/Customer information: The system allows florists and customers to create and update own information. | Must have |
| OC-3: Searching Function: The system allows customer to search the flowers according to price, location and review Function. | Must have |
| OC-4: Flower Delivery: The system allows florists to deliver the flowers chosen by customers to the specific address. | Must have |
| OC-5:Order pick up: After preparing the flowers for customers, | Must have |

| | |
|--|------------|
| florists can notify customers to pick up their flowers. | |
| OC-6: Tracking orders: The system allows customers and florists to track the status information about order, which makes the transaction more transparent. The florist could set the status of a specific transaction as received, processing, out for delivering, delivered separately. And the customer could check the status by clicking a button. | Must have |
| OC-7: Payment Function: The system allows customers to pay directly online. | Must have |
| OC-8: Order history: The system allows customers to check their order history so that they have a record of what they bought. And the system likewise allows florists to track their order history so that they have a record of their past transactions. | Must have |
| OC-9: Rating & Review: The system allows customers to rank and review the flowers they bought. | Must have |
| OC-10: Private Messaging: The system allows customers to consult florists about flowers and relevant service. | Could have |

3.2.2 Level of Service Goals

| Level of Service Goals | Priority Level | Referred WinWin Agreements |
|---|----------------|--|
| LOS-1: Availability: The system should be available to users for use with the least amount of downtime as possible. The percentage of uptime to total running time of the system should be 95% at least. | Must have | WC_3471 WC_3470 WC_3434 WC_3354 WC_3352 WC_3351 WC_3346 WC_3345 WC_3344 WC_3343 WC_3342 WC_3339 |
| LOS-2: Query Correctness: The results we get by doing search operation should be correct. | Must have | WC_3359 WC_3358 WC_3353 WC_3352 WC_3349 WC_3346 WC_3345 WC_3344 WC_3337 |
| LOS-3: System response time to web browsing: The time of page advancing and the time | Must have | WC_3471 WC_3470 WC_3359 |

| | | |
|---|-----------|--|
| system takes to get function response should be less than 5 second. | | WC_3358 WC_3356 WC_3353 WC_3341 WC_3339 WC_3338 |
| LOS-4: Browser Compatibility: The system should work smoothly and normally on different browsers, including Chrome, Safari, IE, Firefox. | Must have | |

Table 2: Level of Service Goals

3.2.3 Organizational Goals

OG-1: Increase revenue/profit for florist by saving unnecessary cost on the payment platform provide better price of flowers.

OG-2: Help customer enhance shopping experience by providing more choice and better order tracking service.

OG-3: Increase the system ability of finding nearby florists by using specific API.

OG-4: Increase customer base/web presence for florists.

OG-5: Increased customer pickup convenience.

3.2.4 Constraints

CO-1: Compatible with back-end database: The web should be compatible with the current back-end database.

CO-2: Monetary Budget: The selected NDI/NCS should be within the budget.

3.3 Proposed New Operational Concept

3.3.1 Element Relationship Diagram

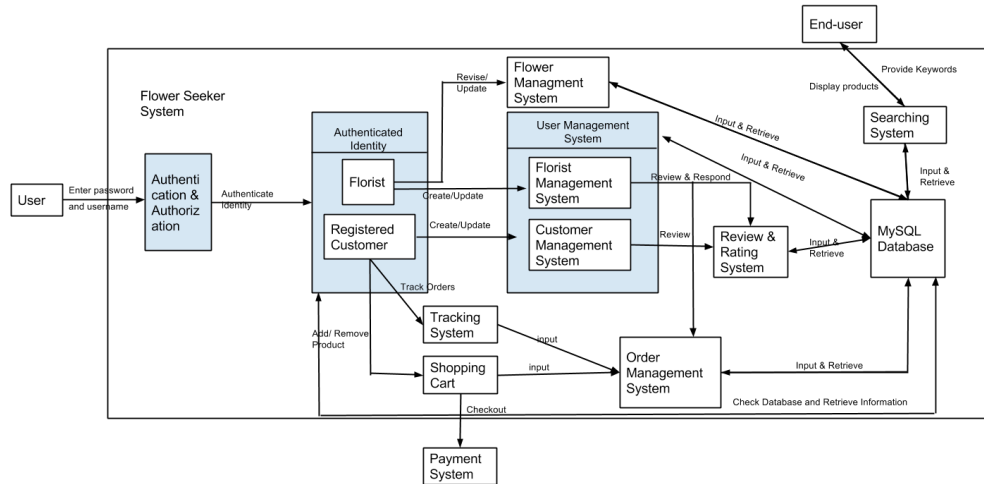


Figure 4: Element Relationship Diagram of FlowerSeeker

3.3.2 Business Workflows

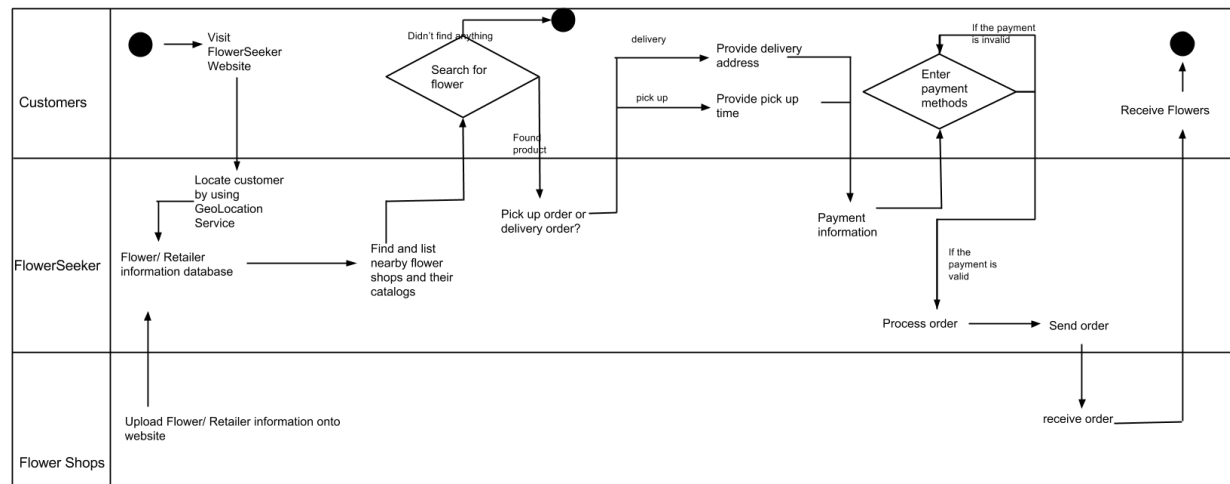


Figure 5: Business Workflow Diagram of FlowerSeeker

3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

- The need to hire people having experience about front end to design the detailed UI.
- The need for team members to learn about the Spring JPA in order to connect the front-end and back-end efficiently.

3.4.2 Operational Transformations

- Having service to help customer customize their products according to specific events, such as birthday and wedding.
- Helping florists to save cost by reducing the subscription cost to join the network.
- Helping customer locate the closely retailers by themselves.
- Completing and improving the design of front end of the system.