



# INITIAL PROJECT REPORT

SENG2011

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# Executive Summary

PartyWhip is an interactive website which provides the opportunity of outsourcing a food-related occasion. The aim of the website is to allow users to post requests for reliable catering services, which can be ranged from a large venue to a small family dinner. In response, it also allows organisations, businesses or private individuals to bid on the provision of food services.

In PartyWhip, two types of users can be registered: the poster and the bidder. Posters can access variety of service requesting features, including requesting and accepting catering services, as well as evaluating provisors of services. When requesting a food service, the poster can specify the requiring food type, the initial budget, scale, time and location of the event, as well as any other additional requirements. After the bidding period, the poster can select a satisfying bidder who will be responsible for the requested catering service. Furthermore, the poster can also review the service and rate the bidder, which will be reflected on the bidder's ratings information.

Bidders can access PartyWhip's service provision features, including searching desired services requests and bidding on them. Bidders can browse through a list of requests that matches their specialty in food. The search list of requests can be further filtered by its time, location, budget and scale. The bidder can place a bid on a catering service request and convince the poster which they can provide a reliable and satisfying service. Once the bidder has been selected by the poster, the bidder will be responsible to provide the food service. Bidders can also update their personal information, such as contact information and specialty in food.

The aim of PartyWhip is to outsource trustworthy catering services for both the poster and the bidder in the most convenient way, since it is difficult to guarantee that satisfying and reliable experiences can be always provided to users. Thus, to enhance the user experience, the PartyWhip system has included some exclusive features such as chat system between the poster and the bidder, as well as sorting bidders against similarity and user ratings. Furthermore, verification and testing are executed to proof that the system functions work correctly.

# Requirements

This section outlines all possible requirements for the implementation of this project. These requirements are organized into a list and prioritised using the MoSCoW notation:

- [Priority 1]: Indicates 'Must Have' features. These are critical requirements that lead to the success or failure of PartyWhip system.
- [Priority 2]: Indicates 'Should Have' features. These are important however not essential requirements that may be implemented after all priority 1 features have been implemented.
- [Priority 3]: Indicates 'Could Have' features. These are requirements that have been deemed desirable but not crucial. These requirements are difficult to be displayed on the initial release and most likely to be appeared on a version update of PartyWhip system.
- [Priority 4]: Indicates 'Won't Have' features. These are requirements that the development team have denoted as the least critical. They will not appear on the system's initial release; however, these features will result in positive impacts to the system development.

## Poster

A poster is someone who wants to post a task on PartyWhip and choose the bidder he/she desires.

- 1 [Priority 1] Posters can post one or more requests of food provision
  - 1.1 [Priority 1] Posters must specify basic parameters for requests
    - 1.1.1 [Priority 1] name and message of the request
    - 1.1.2 [Priority 1] number of people
    - 1.1.3 [Priority 1] location
    - 1.1.4 [Priority 1] date and time
    - 1.1.5 [Priority 1] food types
    - 1.1.6 [Priority 2] the closing time of bids
    - 1.1.7 [Priority 1] budget for whole event
    - 1.1.8 [Priority 1] status of the request
  - 1.2 [Priority 2] Posters can specify some other parameters
    - 1.2.1 [Priority 2] A post can only select one parameter value for a field (Couldn't have multiple parameters with one field)
    - 1.2.2 [Priority 2] Poster can see all the provided parameters
- 2 [Priority 1] Posters can view requests they posted
  - 2.1 [Priority 1] Posters can view all requests they posted in a list
    - 2.1.1 [Priority 3] Posters can sort the requests by the date
    - 2.1.2 [Priority 2] Posters can filter requests by their status
    - 2.1.3 [Priority 4] Posters can sort the requests by the latest bid
    - 2.1.4 [Priority 4] Posters can filter requests by some other parameters
  - 2.2 [Priority 3] Posters can chat with a bidder under the created post or its bids
    - 2.2.1 [Priority 3] Posters can add message under the bidder's bids

- 2.2.2 [Priority 3] Posters can reply to the message added by bidder
- 2.2.3 [Priority 3] These messages can be viewed by everyone
- 2.3 [Priority 1] Posters can choose bidders for an open request
  - 2.3.1 [Priority 2] Bidders will be sorted based on their bidding price and bidding time
  - 2.3.2 [Priority 2] Poster can see all bidders' comments written by previous posters.
  - 2.3.3 [Priority 3] Poster can view bidders' information on bidders' profile
  - 2.3.4 [Priority 2] When a request is overdue, it should be automatically cancelled
  - 2.3.5 [Priority 3] Posters can evaluate a bidder after a request is completed
    - 2.3.5.1 [Priority 3] Poster can only rate his post
    - 2.3.5.2 [Priority 3] The rate should be one to five stars in integers
    - 2.3.5.3 [Priority 3] Posters can rate the bidder for this request
    - 2.3.5.4 [Priority 4] Posters can write comments to this bidder
  - 2.3.6 [Priority 3] Poster will see the recommend stars of all the bidders who bid the post.
    - 2.3.6.1 [Priority 3] The recommend starts is based on the rate of other posters' rate to this bidder
    - 2.3.6.2 [Priority 3] The recommend starts is based on the parameters of this posts.
    - 2.3.6.3 [Priority 3] Appear 0 rate if these rules are not applied, such as there's no rate to this bidder, this bidder has done nothing about the given parameter of this post.
- 2.4 [Priority 1] Posters can manage his posts
  - 2.4.1 [Priority 1] Posters can cancel a processing or deal state request which created by themselves
  - 2.4.2 [Priority 2] Posters can edit details of a request created by themselves and not in state Finished or Cancelled
  - 2.4.3 [Priority 2] Posters can regret for selecting a bidder 6 hours prior the service requesting time
- 3 [Priority 1] Posters can register and log in
  - 3.1 [Priority 3] Posters can edit and provide contact details
    - 3.1.1 [Priority 3] Phone number
    - 3.1.2 [Priority 3] Email
    - 3.1.3 [Priority 3] Name
    - 3.1.4 [Priority 3] Address
    - 3.1.5 [Priority 4] Additional information

## ***Parameter***

- 4 [Priority 1] Parameters can only be CRUD (Change Read Update Delete) by admin
  - 4.1 [Priority 1] Parameters cannot be hard deleted
- 5 [Priority 2] Parameter is a key-value pair, including
  - 5.1 [Priority 2] nature of event
  - 5.2 [Priority 2] level of food quality
  - 5.3 [Priority 2] special diet
  - 5.4 [Priority 2] religious restriction
  - 5.5 [Priority 2] provision of alcohol
  - 5.6 [Priority 2] age profile

- 5.7 [Priority 2] kitchen size
- 5.8 [Priority 2] indoor/outdoor
- 5.9 [Priority 3] additional provision of crockery/glasses/cutlery/chairs

## ***Bidder***

Bidder is a user who wants to bid a task and finish the post when he/she is chosen by the poster.

- 6 [Priority 1] Bidders can view a list of posted requests
  - 6.1 [Priority 2] Default list is sorted by relevant rate
  - 6.2 [Priority 2] Bidders can sort requests
    - 6.2.1 [Priority 2] sort by latest bidding price
    - 6.2.2 [Priority 2] sort by latest bidding time
    - 6.2.3 [Priority 2] sort by relevance
  - 6.3 [Priority 2] Bidders can filter requests
    - 6.3.1 [Priority 2] filter by food type
    - 6.3.2 [Priority 2] filter by region
    - 6.3.3 [Priority 2] filter by due time
    - 6.3.4 [Priority 2] filter by other parameters
  - 6.4 [Priority 4] Bidders can only see requests with food types they can provide
- 7 [Priority 1] Bidders can place bids on requests
  - 7.1 [Priority 1] Bid need to provide the offer budget and leave some comments
  - 7.2 [Priority 3] Bidder can chat with posters and other bidders
    - 7.2.1 [Priority 3] Bidder can chat under the poster's request to obtain more information about the occasion
    - 7.2.2 [Priority 3] Bidder can chat under another bidder's bid about the specific bid
    - 7.2.3 [Priority 3] Bidder can reply other bidders' chat, as well as posters'
    - 7.2.4 [Priority 3] These chats can be viewed by everyone
  - 7.3 [Priority 4] get notification when a bid update
- 8 [Priority 2] Bidders can delete their own bids
  - 8.1 [Priority 3] Bids that have been chosen by posters cannot be deleted
- 9 [Priority 1] Bidders can register and log in
  - 9.1 [Priority 3] Bidder must have a profile
    - 9.1.1 [Priority 3] Bidder can edit its own profile
      - 9.1.1.1 [Priority 3] contact details
      - 9.1.1.2 [Priority 3] the information of restaurant (if applicable)
      - 9.1.1.3 [Priority 3] food types they can provide
      - 9.1.1.4 [Priority 3] past photos of catering services they provided
      - 9.1.1.5 [Priority 3] preferred time for service provision (help to match posts more effectively)
  - 9.2 [Priority 3] Bidders can view posters' contact information when they have been selected for the posters' requests
    - 9.2.1 [Priority 3] Only allow to view the details when the bidder and the poster has a dealing relationship (i.e. hold a post that is in Deal state)

## ***Admin***

Admin can access all the necessary data to manage the website and provide customer service.

- 10 [Priority 3] Admin can log into a system different from bidder and poster
- 11 [Priority 3] Admin can delete the account of bidders and posters
- 12 [Priority 3] Admin can CRUD all Post and Bid
- 13 [Priority 3] Admin can CRUD all Parameters
  - 13.1 Newly created parameters can be selected afterwards
  - 13.2 Deletion of created parameters will not affect any ongoing or past posts

# Use Cases

## **Use Case 1:**

Post a request

Actor:

User (Poster)

Basic Flow:

The poster selects Post New Request and the website is redirected to a new page. The poster may wish to fill out following parameters - nature of event, level of food quality, special diet, religious restriction, provision of alcohol, age profile, kitchen size, indoor or outdoor, as well as additional provision of crockery/ glasses/cutlery/chairs. After clicking Confirm, the request is posted.

## **Use Case 2:**

View posts

Actor:

User (Bidder)

Basic Flow:

The bidder browses through a list of posted requests and sees the title, message, chosen parameters for each post. Then the bidder can choose a specific post to see the details of the post and biddings list in a new page.

Alternative Flow 1:

When the bidder browses the list of created posts, he/she can select one or more key parameters such as post status and filters the list of posts by the chosen key. Then only posts that satisfies these conditions will appeared.

Alternative Flow 2:

When the bidder browses the list of created posts, he/she can select one or more parameter such as last bidding date to sort the list of posts by the parameter.

## **Use Case 3:**

Bid a request

Actor:

User (Bidder)

Basic Flow:

When a bidder is in Show Posts page, the bidder can select Detail for the desired posted request and will be redirected to a new page. The bidder sees a list of bids that have been made and need to make a bid that is lower than the budget. After entering the bidding price, the bidder clicks Confirm and the bid has been made.

**Use Case 4:**

Choose a Bid

Actor:

User (Poster)

Basic Flow:

The poster selects a created post that the user wishes to decide the bidder. When the poster browses through all bids for the request, he/she can see the bid price and any comment made by each bidder. The list is automatically sorted against the bidder ratings. The poster can select any bidder in the bidding list to view their profiles. This includes the bidder's contact details, average rank rated, and comments written by other posters. After that, the poster selects the desired bidder, and the bidder will be notified. During the dealing stage, the chosen bidder can view the poster's profile.

Alternative Flow:

If the poster did not choose a bidder before the due date of the request, the request will be changed to Close state automatically.

**Use Case 5:**

Registration

Actor:

User

Basic Flow:

A user who wishes to be a poster clicks Register button on the main page and will be redirected to a new page specified for registration. Firstly, username and password should be provided. The user can provide contact details such as name, residential address, phone number and email address, as well as any additional information.

Alternative Flow:

A user who wishes to be a bidder clicks Register button on the main page and will be redirected to a new page specified for registration. They follow same steps as posters initially, which are providing username, passwords and contact details. In addition, they can provide food specialty, past photos of provided catering services and preferred time for service provision.

**Use Case 6:**

Website Management

Actor:

Admin

Basic Flow:

The Admin page allows admin to explore all necessary data for website management and provision of customer service. This includes managing user accounts, posts, parameters and bids.



**Use Case 7:**

Evaluate a bidder

Actor:

User (Poster)

Basic Flow:

After the chosen bidders complete the task posted by the user, the user can rate the bidders according to his or her satisfaction level. In addition, the user can write comments to the bidders once the bidders complete the task.

**Use Case 8:**

Edit post detail

Actor:

User (Poster)

Basic Flow:

The poster can select a specific post from post list, if the post is not in the state Finished or Cancelled, then he/she can edit all details and extra parameters of this post. Then all the bids of this post will be suspended, which means the user won't be allowed to choose from these suspended bids. Bidders should get notified and make new bids for this task.

**Use Case 9:**

Regret a post

Actor:

User (Poster)

Basic Flow:

The poster can select a specific post from post list, if the post is in the Processing or Dealing state and it's more than 6 hours prior the service provision time, then the user can choose to regret choosing this bidder. Then this chosen bidder will be notified about it, and the post will be in Open State Again. Then all the bids of this post will be suspended, which means the user won't be allowed to choose from these suspended bids. Bidders should get notified and make new bids for this task.

**Use Case 10:**

Chat under a post

Actor:

User

Basic Flow:

When a request is posted, bidders who have concerns about the request can post comments under the request, any other bidders and the poster who posted the request can reply the comment.

Alternative Flow:

A poster can comment or message under his/her requests' bids, which can be replied by bidders who have participated in this request.

**Use Case 11:**

Add new parameters

Actor:

Admin

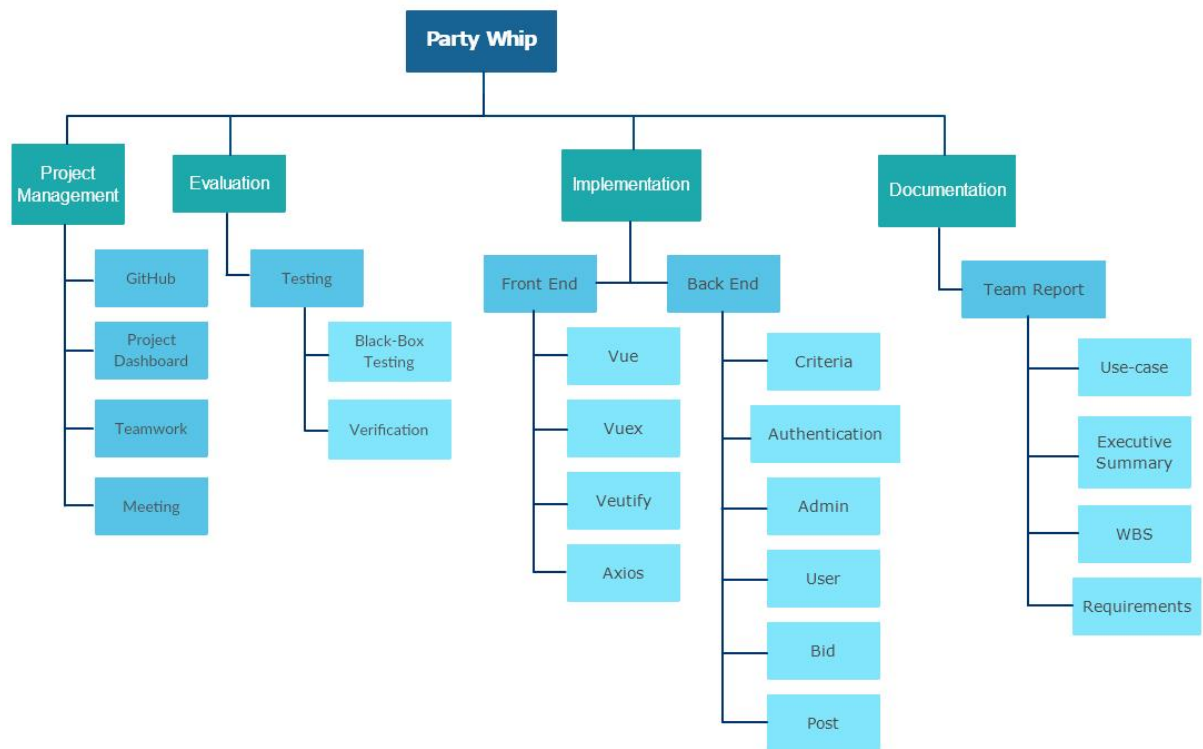
Basic Flow:

Admin can add new (key, value) pairs as parameters in the back-end. Then posters can choose these parameters as extra parameters in their new tasks.

Alternative Flow:

Admin can delete parameters in the back-end. Then posters will not be allowed to choose these parameters further in their new tasks. However, these deleted parameters that appear in their existing and past requests remain.

# Work Breakdown Structure



## Responsibility for each team member:

Toby HUANG	Project Management (and its sub-structures), Implementation - Back-end (and its sub-structures)
Hui LIN	Documentation (and its sub-structures)
Yufei ZHAO	Black-box testing, Front-end (and its sub-structures)
Zilu DONG	Verification, Front-end (and its sub-structures)