3. Specific Requirements

Each requirement specified (either functional or non-functional) of the Conference Management System is classified based on client’s classification of mandatory or optional.

* Mandatory: Requirements of highest importance level. Mandatory requirements are those that reflect core functionalities of the Conference Management System and must be implemented.
* Optional: Requirements of lowest importance level. Optional requirements reflect enhanced functionalities of the Conference Management System that should only be considered when all Mandatory requirements have already been completed.

3.1 Functional Requirements

**3.1.1 Users Management Subsystem**

This section captures functionalities that the Conference Management System provides for users to execute a variety of actions depending on their roles. Different roles include Administrator, Program Committee Chairs, Program Committee and normal users.

*3.1.1.1 Administrator Side*

This section includes functions for the system admin to manage the configuration of the system and assign different roles to the users.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.1\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow the administrator to assign Program Committee Chairs. | | |
| **Rationale:** System Admin wants to assign Program Committee Chairs. | | |
| **Source:** | | |
| **Fit Criterion:** System Admin successfully assigns Program Committee Chairs. | | |
| **Dependencies:** | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

*3.1.1.2 Program Committee Chair Side*

Extra: PC chairs to set deadline of submission

This section includes functions which allows the Program Committee (PC) Chairs to oversee and manage users of the system

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.2\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow the PC chairs to assign Program Committees. By going through the list of users, assignment of Program Committees are based on the users interests and how closely tied the user’s interest is to the conference topic. | | |
| **Rationale:** PC chairs needs to assign Program Committees | | |
|  | | |
| **Fit Criterion:** PC chairs successfully assign a normal user the role of Program Committee | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.2\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow the PC chairs to monitor the program committee. Types of information required when monitoring the program committee includes   * Number of papers assigned to each Program Committee * Papers assigned to each PC * Papers which has been reviewed by each PC * Papers which has not been reviewed by each PC * Reviews on paper wrote by each PC * Preferences on each paper | | |
| **Rationale:** PC chairs want to monitor the Program Committees. | | |
|  | | |
| **Fit Criterion:** PC chairs are able to monitor the Program Committee successfully. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.2\_03 | **Requirement Type:** Functional |  |
| **Description:** The system should allow the PC Chairs to check on the latest events. The type of events include   * Submission of a paper by an author * An upcoming deadline * Submission of review by a reviewer * An event that recently expired * (TO BE ADDED) | | |
| **Rationale:** PC chairs want to monitor the Program Committees. | | |
|  | | |
| **Fit Criterion:** PC chairs are able to monitor the Program Committee successfully. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

*3.1.1.3 User side*

This section includes functions which allow users to interact with the system.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.3\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow creation of new accounts by new users. Types of information required when creating a new account includes   * First Name * Last Name * User Name * Email * Password * Expertise * University | | |
| **Rationale:** New users need to create a new account. | | |
|  | | |
| **Fit Criterion:** New users successfully create a new account. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.3\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow users to change their own account passwords. | | |
| **Rationale:** Users to change their account password. | | |
| **Source:** Client – Hoa Dam | | |
| **Fit Criterion:** Users successfully change their account password. | | |
| **Dependencies:** Users must have an account. Refer to F\_3.1.1.3\_01. | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 3/9/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.3\_03 | **Requirement Type:** Functional |  |
| **Description:** The system should allow users to modify their personal details. | | |
| **Rationale:** Users to modify their personal details. | | |
| **Source:** Client – Hoa Dam | | |
| **Fit Criterion:** Users successfully modifies their personal details. | | |
| **Dependencies:** Users must have an account. Refer to F\_3.1.1.3\_01. | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 3/9/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.1.3\_04 | **Requirement Type:** Functional |  |
| **Description:** The system should allow users to view their personal details. | | |
| **Rationale:** Users to view their personal details. | | |
| **Source:** | | |
| **Fit Criterion:** Users successfully views their personal details. | | |
| **Dependencies:** Users must have an account. Refer to F\_3.1.1.3\_01. | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 3/9/2014 | | |

**3.1.2 Paper Management Subsystem**

This section captures the functionalities that the Conference Management System provides to the users to manage research papers, including submission of research papers, assignment of research papers to the reviewers.

*3.1.2.1 Paper submission*

This section includes functionalities for the users to submit papers to the system.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.1\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow existing users to submit papers to the system. User who submits a paper will automatically be assigned the role of author. During submission of papers, authors are to fill in forms about the details of the paper and also information about the author.   * Information of author includes  1. First Name 2. Last Name 3. Email 4. University  * Information of paper includes  1. Title 2. Abstract 3. Keywords   Authors who submit the paper will fill in details about other authors who have contributed to the paper. Authors are permitted to submit an unlimited amount of papers. | | |
| **Rationale:** Existing user needs to submit a paper to the system. | | |
|  | | |
| **Fit Criterion:** User successfully submits a paper to the system. | | |
| **Dependencies:** User who submits a paper must have an existing account. Refer to F\_3.1.1.3\_01. | | |
| **Classification:** Mandatory | | |
| **History:**   * Created by Ng Shien Wee on 29/8/2014 * Edited by Ng Shien Wee on 3/9/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.1\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow authors to modify their submissions. Modification includes changing the details of the authors and resubmission of paper. This must be done before the submission deadline. | | |
| **Rationale:** Authors to modify their submissions. | | |
|  | | |
| **Fit Criterion:** Authors successfully modify their submissions. | | |
| **Dependencies:** \*\*\*\*Depend on deadline? | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

\*\*\*\* 3.1.2.1\_03 (needs work)

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.1\_03 | **Requirement Type:** Functional |  |
| **Description:** The system should be able to assign users who have contributed to the papers automatically. This is related to requirement F\_3.1.2.1\_01. This process is only done when multiple author details has been added to a paper submission. Based on the email address of the authors (excluding the author who submitted the paper), the system should be able to link the paper to the respective user accounts. | | |
| **Rationale:** System to assign users to their papers. | | |
| **Source:** Client – Hoa Dam | | |
| **Fit Criterion:** System successfully assigns user to their papers. | | |
| **Dependencies:** When linking paper to user accounts, user account must exist. Refer to F\_3.1.2.1\_01. | | |
| **Classification:** Mandatory | | |
| **History:**   * Created by Ng Shien Wee on 29/8/2014 * Edited by Ng Shien Wee on 3/9/2014 | | |

*3.1.2.2 Paper assignment to reviewers*

This section includes functionalities for the Program Committees, which are also known as reviewers to be assigned a paper for review.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.2\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow reviewers to look through the list of paper submitted and specify their preferences on each paper. When looking through the list of papers, reviewers are only allowed to look at the following   * Keywords * Abstract * Title   Preferences that can be specified by the reviewers include “Yes”, “No”, “Maybe” and “Conflict of Interest”. | | |
| **Rationale:** Reviewers specify their preference on each paper. | | |
| **Source:** Client – Hoa Dam | | |
| **Fit Criterion:** Reviewers successfully specify their preference on each paper. | | |
| **Dependencies:** | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

\*\*\*\* 3.1.2.2\_02 (needs work)

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.2\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow PC chairs to automate the process of specifying user preferences on papers. This process is only done if a user has not specified any preferences on a particular paper. This automation process involves looking through the keywords of the paper submitted with the expertise of the reviewer. A percentage value would be given on how closely related they are. Closely related being how many keywords match the expertise of the reviewer. The higher the percentage, the more closely related they are. | | |
| **Rationale:** System needs to automatically assign preferences to paper. | | |
| **Source:** Client – Hoa Dam | | |
| **Fit Criterion:** System successfully assigns preferences to paper. | | |
| **Dependencies:** | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.2\_03 | **Requirement Type:** Functional |  |
| **Description:** The system should allow PC chairs to automate the process of assigning papers to the reviewers. This process involves looking at the preferences of the reviewer and assigns the paper. There is a possibility where a reviewer can be assigned a paper where his/her preference is “No”. This happens under a certain condition being   * A paper has reached its maximum number of reviewers * A reviewer has not been assigned the maximum number of papers. | | |
| **Rationale:** Existing user needs to submit a paper to the system. | | |
|  | | |
| **Fit Criterion:** User successfully submits a paper to the system. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.2\_04 | **Requirement Type:** Functional |  |
| **Description:** The system should allow PC Chairs to manually assign paper to reviewers. | | |
| **Rationale:** PC Chairs need to manually assign paper to reviewers. | | |
|  | | |
| **Fit Criterion:** PC Chairs successfully assign paper to reviewers. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.2\_05 | **Requirement Type:** Functional |  |
| **Description:** The system should allow PC Chairs to set the number of reviewers for each paper or all the papers. (\*\*\*\*\*\*RECONFIRMATION NEEDED) | | |
| **Rationale:** PC Chairs need to manually set the number of reviewers for each paper or all of them. | | |
|  | | |
| **Fit Criterion:** PC Chairs successfully set the number of reviewers for each of the paper or all of them. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

\*\*\*\*\*\*\*\*\*\*\*Maybe needs splitting

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.2\_06 | **Requirement Type:** Functional |  |
| **Description:** The system should allow PC Chairs to set a global number of papers each reviewer can receive or an individual limit. | | |
| **Rationale:** PC Chairs need to manually assign the number of papers a reviewer can receive or set a global limit for it. | | |
|  | | |
| **Fit Criterion:** PC Chairs successfully assign the number of papers a reviewer can receive or set a global limit for it. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

*3.1.2.3 Conference Proceeding*

This section includes functionalities for the preparation of conference proceedings.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.3\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should be able to automatically generate the conference proceeding. This is done by looking through the list of papers, then generating a list of accepted papers. List of accepted papers are grouped according to the topics. | | |
| **Rationale:** System automatically generates conference proceeding. | | |
|  | | |
| **Fit Criterion:** System successfully generates the conference proceeding. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.2.3\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow Program Committee Chairs to manually group the list of papers based on the topics for the conference proceeding. | | |
| **Rationale:** PC chairs manually group papers based on their topics. | | |
|  | | |
| **Fit Criterion:** PC Chairs successfully group papers based on the topics. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

**3.1.3 Paper Review Management Subsystem**

This section captures the functionalities that the Conference Management System provides for users to execute different actions related to paper reviews. Different roles include Program Committee Chairs, Program Committee and the authors, who are also known as users.

*3.1.3.1 Program Committee Chairs Side*

This section includes functionalities for the Program Committee Chairs to manage paper reviews.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.3.1\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow Program Committee Chairs to enable or disable paper review discussions among the reviewers. | | |
| **Rationale:** Program Committee Chair to enable or disable review discussions. | | |
|  | | |
| **Fit Criterion:** Program Committee Chairs successfully enables or disable review discussions. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.3.1\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow Program Committee Chairs to accept or reject a paper based on the reviews and discussion submitted by the reviewers. PC chairs will have a page listing all the papers submitted, choose a paper and get more details about the paper. Details about the paper include   * Information about the contributed authors * Paper information * Reviewers * Completed Reviews * Discussions | | |
| **Rationale:** Program Committee Chair to enable or disable review discussions. | | |
|  | | |
| **Fit Criterion:** Program Committee Chairs successfully enables or disable review discussions. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.3.1\_03 | **Requirement Type:** Functional |  |
| **Description:** The system should allow Program Committee Chairs to enable or disable the functionality where the authors are able to leave a respond about the reviews on his/her paper. | | |
| **Rationale:** Program Committee Chair to enable or disable author response on the review. | | |
|  | | |
| **Fit Criterion:** Program Committee Chairs successfully enables or disable author response on the review. | | |
|  | | |
| **Classification:** Optional | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

*3.1.3.2 Reviewers Side*

This section includes functionalities for the Program Committee to submit paper reviews and discuss reviews done by other reviewers.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.3.2\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow the reviewers to choose from a list of assigned papers and review the paper based on the given evaluation form. The reviewer submits when review is completed. | | |
| **Rationale:** Reviewers to submit paper reviews. | | |
|  | | |
| **Fit Criterion:** Reviewers successfully submits the paper review. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.3.2\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow the reviewers to modify the reviews he/she has submitted. | | |
| **Rationale:** Reviewers to modify paper reviews | | |
|  | | |
| **Fit Criterion:** Reviewers successfully modifies the paper review. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.3.2\_02 | **Requirement Type:** Functional |  |
| **Description:** The system should allow reviewers to discuss about the reviews submitted by different reviewers, who have been assigned the same paper. Authors are not allowed to see the discussion among the reviewers. | | |
| **Rationale:** Reviewers to discuss with other reviewers about the paper reviews | | |
|  | | |
| **Fit Criterion:** Reviewers successfully discuss with other reviewers about their paper reviews. | | |
|  | | |
| **Classification:** Mandatory | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |

*3.1.3.3 Authors Side*

This section includes functionalities for authors who have submitted papers to respond to reviews provided to them.

|  |  |  |
| --- | --- | --- |
| **Requirement #:** F\_3.1.3.3\_01 | **Requirement Type:** Functional |  |
| **Description:** The system should allow authors to respond to reviews on their paper. This is also known the rebuttal phase. Authors are allowed to read the reviews and leave a comment. | | |
| **Rationale:** Authors are able to leave a comment regarding the reviewers review. | | |
|  | | |
| **Fit Criterion:** Authors successfully leaves a comment. | | |
|  | | |
| **Classification:** Optional | | |
| **History:** Created by Ng Shien Wee on 29/8/2014 | | |