**Requirements**

Purpose

The system will be accessible by helpdesk operators and specialists once development is complete. Prior to that it will be accessible to members of Team014.

Scope

The software should make it easier to log and trace problems at an IT helpdesk within The Make-It-All Company (MIAC) than the current paper-based system and allow for analysis of these logs.

Risks

There are several risks to this project;

1. That the system end up less efficient than the previous system
2. That the system is vulnerable to access from unwanted parties
3. Potential for the corruption of databases

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| Requirement #:1 | Type:Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |
| Description: The system must be more efficient than the current paper based system | | |
| Rationale: Otherwise the implementation would not be worth it | | |
| Fit Criteria: Comparing the help desk operator’s notes from the old system to the new logs | | |
| Dependencies: 16 | | Importance: Must |

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| Requirement #:2 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |
| Description: The system should be expandable to add another operator | | |
| Rationale: The client has requested this functionality | | |
| Fit Criteria: Test adding a new operator | | |
| Dependencies: | | Importance: Should |

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| Requirement #:3 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system should make it easier to track problems | | |
| Rationale: Requested by the client and could make it faster than paper based system | | |
| Fit Criteria: Compare it to the old system | | |
| Dependencies: #1 | | Importance: Should |

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| Requirement #:4 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system must have two different types of user: specialists and operators | | |
| Rationale: These will be the 2 types of people using the system | | |
| Fit Criteria: Check both user groups exist during testing | | |
| Dependencies: | | Importance: Must |

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| Requirement #: 5 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system should allow the operator to log calls | | |
| Rationale: Requested by client | | |
| Fit Criteria: calls will attempt to be logged during testing | | |
| Dependencies: 6 | | Importance: Should |

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| Requirement #: 6 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system should allow the following information to be recorded for each call:   * Caller name * Operator name * Time and date of call * The callers affected hardware, operating system or software | | |
| Rationale: Requested by user to allow the proper logging of problems | | |
| Fit Criteria: Information will attempt to be recorded during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #:7 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system should allow the operator to log problems | | |
| Rationale: Requested by client to allow tracking and allocation of problems | | |
| Fit Criteria: Attempts to log problems will be made during testing | | |
| Dependencies: 8 | | Importance: Should |

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| Requirement #: 8 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system should allow the following information to be recorded for each problem:   * Problem number * A brief description of the problem * The affected equipment * The helpdesk operator * The caller * The type of problem (eg printers) * A list of calls pertaining to the problem * A specialist allocated to the problem if required * The solution to the problem when found | | |
| Rationale: Requested by client as a means of storing all information about a call | | |
| Fit Criteria: Attempts to log the problem will be made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #:9 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system should have a record of all hardware and software in the company | | |
| Rationale: Requested by client and to allow tracking of problems within products | | |
| Fit Criteria: Attempts to access records made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #:10 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system should have a record of the personnel in the company | | |
| Rationale: Requested by client and to allow for problems to be associated to a user | | |
| Fit Criteria: Attempts to access records made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 11 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system should have a list of common problem types (eg printing) | | |
| Rationale: Requested by client and to allow the helpdesk operator to sort problems and allocate to specific specialists | | |
| Fit Criteria: Attempts to use common problems to be made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #:12 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy | Modif: 05/11/19 |
| Description:The system should have a list of the specialists and their specialities and their location | | |
| Rationale:Requested by client and to allow for problems to be allocated to relevant specialists | | |
| Fit Criteria: Attempts to access list made during testing | | |
| Dependencies: 13 | | Importance: Should |

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| Requirement #:13 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy | Modif: 05/11/19 |
| Description: The system should allocate problems based on the workloads of the relevant specialists and their location, if the problem requires on site attention | | |
| Rationale: Requested by client and to allow for problems to be associated to a user | | |
| Fit Criteria: Attempts to access records made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 14 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The helpdesk operator should be able to log and edit new problems and calls | | |
| Rationale: Requested by client and to allow the helpdesk operator to be able to stay on top of problems | | |
| Fit Criteria: Attempts to edit problems and calls to be made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 15 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy | Modif: 06/11/19 |
| Description:The specialist user should be able to view problems and log solutions to problems and reallocate a problem to a different specialist if required | | |
| Rationale: Requested by client and to allow the specialist to view their working problems and solutions | | |
| Fit Criteria: Attempts to view problems and log solutions to be made during testing | | |
| Dependencies: | |  |

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| Requirement #: 16 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system should allow for analysis of performance of the helpdesk with regards to time spent on each problem | | |
| Rationale: Requested by client and to allow the helpdesk operator to compare the efficiency of the new system to the old | | |
| Fit Criteria: Attempts to edit problems and calls to be made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 17 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system should have a feature to view past solutions to aid in finding a solution | | |
| Rationale:Makes finding a potential solution easier if a similar problem has been solved | | |
| Fit Criteria: Attempts to view past solutions will be made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 18 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy | Modif: 06/11/19 |
| Description:The system could have a secure login to identify users and take them to the correct location’s site | | |
| Rationale: Prevents access from undesired users | | |
| Fit Criteria: Attempts to login will be made during testing | | |
| Dependencies: | | Importance: Could |

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| Requirement #: 19 | Type: Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description:The system should log the availability of specialists (eg for holidays and part-timers) | | |
| Rationale: Requested by user and to prevent problems being assigned to unavailable specialists | | |
| Fit Criteria: Attempts to choose unavailable specialists will be made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 20 | Type: Functional | Started: 06/11/19 |
| Author: Sam Coy |  |
| Description:The system should be able to implemented in multiple deployments in different locations | | |
| Rationale: Requested by client upon acquisition of company with multiple locations | | |
| Fit Criteria: Attempts login from different locations will be simulated during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 21 | Type: Functional | Started: 06/11/19 |
| Author: Sam Coy |  |
| Description: The systems in different countries should allow for the sharing of technicians from other locations in remotely solvable problems | | |
| Rationale: Requested by client upon acquisition of company with multiple locations | | |
| Fit Criteria: Attempts to use technicians from various locations to be made during testing | | |
| Dependencies: | | Importance: Should |

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| Requirement #: 22 | Type: Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system must use MySQL to manage its database | | |
| Rationale: Requested by user and is an efficient and known to the team database management system | | |
| Fit Criteria: Queries to be made to the database during testing | | |
| Dependencies: #23 | | Importance: Must |

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| Requirement #: 23 | Type: Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The database could use several tables to store the records about problems, calls, hardware, specialists, and employees | | |
| Rationale: This is an efficient way of using MySQL | | |
| Fit Criteria: Tables to be looked at using the normal forms to make sure they are as efficient as possible | | |
| Dependencies: | | Importance: could |

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| Requirement #: 24 | Type: Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system must be programmed using a combination of Javascript and PHP | | |
| Rationale: Requested by the client | | |
| Fit Criteria: The system will be tested in environments running these | | |
| Dependencies: #25, #26 | | Importance: Must |

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| Requirement #: 25 | Type: Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system might use HTML along with the languages above to create a cohesive website | | |
| Rationale: This will allow the system to be designed in a way that is easy to navigate | | |
| Fit Criteria: The system will be tested | | |
| Dependencies: | | Importance: could |

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| Requirement #: 26 | Type: Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system might use JQuery along with the languages above to create a cohesive website | | |
| Rationale: JQuery functions could assist the PHP and Javascript | | |
| Fit Criteria: If used it will tested to see that it runs | | |
| Dependencies: | | Importance: Might |

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| Requirement #: 27 | Type: Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The team could use Github for sharing code and version management | | |
| Rationale: It acts as a soft back up and allows for easier version control and code sharing | | |
| Fit Criteria: | | |
| Dependencies: | | Importance: Might |

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| Requirement #: 28 | Type: Non-Functional | Started: 14/10/19 |
| Author: Sam Coy |  |
| Description: The system should need to be usable on a computer | | |
| Rationale: This is how it will be accessed by the end users | | |
| Fit Criteria: | | |
| Dependencies: | | Importance: Should |