

# Team 07 Report

## Part I

Arshad Chati

Calin Corcimar  
Rowan Murphy

Jack Humphrey  
Thomas Woolhouse

Adam Hutton

November 2022

# Contents

<b>Contributions</b>	<b>3</b>
Arshad Chati . . . . .	3
Calin Corcimararu . . . . .	3
Jack Humphrey . . . . .	3
Adam Hutton . . . . .	4
Rowan Murphy . . . . .	4
Thomas Woolhouse . . . . .	5
<b>Requirements</b>	<b>6</b>
1. Log in / Registration requirements. . . . .	6
2. Registration Page Requirements & Registration Requirements. . . . .	6
3. User requirements . . . . .	6
4. Team leader requirements . . . . .	6
5. Project Manager requirements . . . . .	7
6. Productivity Management requirements . . . . .	7
7. Task requirements . . . . .	7
8. Project requirements . . . . .	8
9. <i>Project</i> manager dashboard . . . . .	8
10. Manager dashboard requirements . . . . .	8
11. Knowledge Management requirements . . . . .	8
12. Client requirements . . . . .	9
13. System Requirements . . . . .	9

## Contributions

### Arshad Chati

- System Design
  - Login/Registration
    - \* Created Login and Registration designs on Figma as a basis for the rest of the team to begin implementing front-end elements.
  - Productivity Management Sub-system
    - \* Created designs for the productivity management sub-system including different views based on user rank, taking into consideration all features and functionalities and ensuring designs are available for them.
    - \* Designed all ‘dashboards’ and the kanban board used across the site which served as a starting point for further design by other team members during implementation.
  - Knowledge Management Sub-system
    - \* Designed the knowledge management sub-system with separate designs for the search page, results page, post page, edit post page and more.
  - Mobile Views
    - \* Designed basic mobile views as a template for the team to implement mobile first development to produce a more responsive site.
- Re-design based on client communications
  - Responsible for taking client feedback and re-working existing designs to meet their needs or replacing some designs entirely with new ones.
- Part One Presentation
  - Joint responsibility in creating the prototype presentation for the client.
  - Ensuring all relevant information is included, working on timing and ensuring information is kept concise yet informative.

### Calin Corcimar

- Requirements document
  - Gathered and documented the project’s requirements from the specification letter and subsequent communications with Client representatives.
  - Delivered constant updates to the requirements document for maintainign current and adding new requirements.
- Project page
  - Developed the Project page and its elements that dynamically displays information based on the Project id.
  - Implemented functionality that allows Managers to assign tasks to users when creating a new task.
  - Developed a filter that allowed the system to display tasks on the page based on User’s rank.
- Client page
  - Modeled the Client page that dynamically displays all the client information based on the Client id.
- Communications with Client
  - Clarified requirements by sending messages and reminders to the Client.
  - Drafted some of the emails and messages that were then sent to the Client.
- Leadership
  - Coordinated the team (planning, task allocation, decision making, etc) during meetings and other channels of communications (WhatsApp, etc).
  - Ensured the team is on track with task progression and deadlines.

### Jack Humphrey

- Communication with clients
  - Completed the majority of communication with the clients. This involved drafting questions, sending questions and updating our own document with our questions and the clients responses.

- User view page
  - Responsible for creating the user view page. This is a page for users to see information about other users in the system.
- User edit page
  - Responsible for creating the user edit page. This is a page for users to edit their own account information (such as password).
- Login page draft
  - Created an initial draft of the login page which was then reworked by Rowan.

## Adam Hutton

- Created the Dashboard/Task view
  - Including the 'Kanban' section reused elsewhere
- Created the Manager's Dashboard
- Developed ways of displaying progress to the user, including the horizontal progress bar, and the 'spinner' one used in the project page
- Created the navigation, reworked it to work on mobile
- Created the base css used everywhere in the project
  - Including the card and title styles, navigation and ensuring that the designs are consistent and responsive throughout the website.
- Contributed to the requirements document, helping to reword/rewrite requirements to aid in conciseness and reduce ambiguity

## Rowan Murphy

- Built and developed Login and registration pages
  - Created the front of the registration page from scratch and expanded on Jacks' initial draft of the login page.
- Search and parts of search results page
  - Created the search page elements to be used over a number of pages.
  - Used these elements to make the pages responsive and easy to use. Positioned them accordingly to aid in design and the flow of the pages
- Checked through code and caught bugs and features that people missed
  - Proof reading code and caught some issues such as a button missing function
  - Also discovered bugs with certain elements of data usage etc.
- Partook in decisions regarding the project and creation of requirements
  - Assisted in creating the initial requirements draft to give a basis of what the project aimed to do
  - Provided opinions and feedback to make the best decisions when designing, creating and building the project as well as suggesting changes etc. to offer an alternative solutions and a different approach to problems in development where there were multiple viable answers.

## Thomas Woolhouse

- Design the class diagram
  - Modelled the system as a diagram.
  - Modelled the system in js classes.
- Designed and created the api
  - Created a consistent api to be reused throughout the project to make the project reactive.
  - Implemented a schemeless database.
  - Custom serialisation system to allow for content parity between individual webpages.
- Login
  - Functionality to keep track of the current logged-in user.
  - Developed the functionality that allowed users to log in/log out.
- Other contributions
  - Ensured the kanban on the dashboard and the project page are consistent.
  - Coded the system for dividing a task into multiple subtasks.
  - Developed the functionality that allowed Users to be assigned to a task.
  - Coded the functionality that allowed creating, editing and viewing posts.
  - Developed the search functionality that allows searching through posts.
  - Responsible for developing the functionality for creating topics.
  - Responsible for developing the functionality for creating clients.
  - Displaying an employees current workload on both the manager and project page.

# Requirements

Requirements are taken from the client specification letter unless stated otherwise.

## 1. Log in / Registration requirements.

1. A user **must** be able to login to the system using their work email and password.
2. The email address used for logging in **must** be using the @make-it-all.co.uk domain.
3. A user **must** be registered in order to log in to the system.

## 2. Registration Page Requirements & Registration Requirements.

1. The system **must** allow existing users to invite new users to register to the system using their work email.
2. A member of staff **must** be able to register only one account in the system.
3. The email address used for registering **must** be using the @make-it-all.co.uk domain.
4. The password used for registering **must** be at least 12 characters long and contain a combination of at least one uppercase letter, one lowercase letter, a number, and a special character (!@#\$%^&\*).<sup>1</sup>
5. A confirmation email **could** be sent out to the email address used for registration to check for a valid email.<sup>2</sup>

## 3. User requirements

1. The system **must** allow a user to have at least one of the following roles: Employee, Team leader or Project Manager.
2. The system **must** allow a user to have different permissions dependant on their currently assigned role.<sup>3</sup>
3. A user **must** be able to be assigned to a *Project*.<sup>4</sup>
4. A user **must** be able to work on any number of *Projects*.<sup>5</sup>
5. A user **must** be able to create a private task for their private to-do list.<sup>6</sup>

## 4. Team leader requirements

1. A team **must** have a team leader.
2. The system **must** allow any user to be a team leader.<sup>7</sup>
3. The system **must** allow a user to be a team leader for multiple projects.<sup>8</sup>
4. A team leader **must** be able to manage the members of their team (add, remove).<sup>9</sup>
5. A team leader **must** be able to assign tasks to users in their team.<sup>10</sup>
6. A team leader **must** be able to create tasks for a *Project* they supervise.<sup>11</sup>
7. A team leader **must** be able to track task progress of a *Project*.

---

<sup>1</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=358985>

<sup>2</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=358983#p554513>

<sup>3</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>4</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355047>

<sup>5</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355049>

<sup>6</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355053#p549541>

<sup>7</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>8</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>9</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>10</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355075#p549565>

<sup>11</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

## 5. Project Manager requirements

1. A *Project* manager **must** be able to manage all the *Projects* in the system. <sup>12</sup>
2. A project manager **must** be able to add tasks to any current *Project*. <sup>13</sup>
3. A project manager **must** be able to assign users to *Project* tasks. <sup>14</sup>
4. A project manager **must** be able to create a new *Project*. <sup>15</sup>
5. A project manager **must** be able to assign users to a team. <sup>16</sup>

## 6. Productivity Management requirements

1. A user **must** also have access to their private to-do list that is not related to any *Projects* and is only viewable by that user. <sup>17</sup>
2. A user **must** have access to their personal dashboard, which will contain task they are assigned to from *Projects* they are working on and their own private todo list. A private todo list is a users personal to-do list which contains tasks that are not related to any *Projects*.
3. The board **must** have columns in the 'Kanban' view that tasks can be placed in. <sup>18</sup>
4. The system **should** allow users to switch between a Kanban and 'to-do list' view. <sup>19</sup>

## 7. Task requirements

1. A task **must** have a name that will be displayed.
2. A task **should** have a description.
3. A task **must** have a date for a deadline. <sup>20</sup>
4. A task **must** have an estimated number of worker-hours needed to complete the task. <sup>21</sup>
5. A task **should** have the option of being divided into smaller sub-tasks. A sub-task is a task, that the parent tasks depends on. <sup>22</sup>
6. If a task has sub-tasks, then its worker-hours **should** be calculated as a sum of the worker-hours of the smaller tasks. <sup>23</sup>
7. A task **must** be able to display the current state it is in. (To-Do, In Progress, Complete). <sup>24</sup>
8. A task with subtasks **should** display the percentage of sub-tasks that are completed. <sup>25</sup>
9. A task **should** be able to be categorized as either a *Project*-specific (select which *Project*) or private task (not related to any project). <sup>26</sup>
10. The system **should** allow a Project Manager/Team leader to modify and re-assign a Task. <sup>27</sup>
11. The system **could** allow a Sub-Task to be divided into multiple Sub-Tasks. <sup>28</sup>

---

<sup>12</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>13</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>14</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>15</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>16</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p554145>

<sup>17</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355053#p549541>

<sup>18</sup>14/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=356809>

<sup>19</sup>14/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=356809>

<sup>20</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355045#p549487>

<sup>21</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355051#p549539>

<sup>22</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355051#p549539>

<sup>23</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355051#p549539>

<sup>24</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355051#p549539>

<sup>25</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355051#p549539>

<sup>26</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355053#p549541>

<sup>27</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=359721#p554115>

<sup>28</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355051#p549539>

## 8. Project requirements

1. A *Project* **must** have a title. <sup>29</sup>
2. A *Project* **should** have a description.
3. A *Project* **must** have a date for a deadline. <sup>30</sup>
4. A *Project* **must** have a progress displayed, which is measured by the percentage of tasks completed. <sup>31</sup>
5. A *Project* **must** have a client. <sup>32</sup>
6. A *Project* **must** have a team assigned to it. <sup>33</sup>
7. The system **should** allow users to view the teams of their projects.

## 9. *Project* manager dashboard

1. The project manager **should** be able to access and manage *Project* details from their dashboard. <sup>34</sup>
2. The project manager dashboard **should** allow the project manager to manage teams and users that are assigned to their *Project*. <sup>35</sup>

## 10. Manager dashboard requirements

1. The manager dashboard **should** allow a team leader or project manager be able to see how many tasks a user currently has assigned.
2. The *Project* tasks **could** be able to be filtered based on *Project* or team member assigned to it.
3. A *Project* **should** display whether it is sufficiently resourced. This is determined based on the sum of worker-hours required by its tasks, the number of workers assigned and the Project's deadline. <sup>36</sup>
4. The manager dashboard **could** display a warning to a Project Manager/Team Leader if the project is expected to fall behind the deadline, based on worker hours (see above)
5. A manager/team leader **could** be warned that a employee needs training if they are behind a deadline or having trouble working on a specific task. <sup>37</sup>

## 11. Knowledge Management requirements

1. The system **must** allow a user to create a new post.
2. The knowledge management subsystem **must** have a search functionality where a User can search Posts by specific Topics. <sup>38</sup>
3. Posts **could** be viewable by all users by default. This option can be changed to be accessible only by an employee with certain permissions (Manager, Team lead, User). <sup>39</sup>
4. Posts **must** only be able to be edited by a Manager or the User who has created it. <sup>40</sup>
5. The subsystem **could** contain a FAQ page. <sup>41</sup>
6. The subsystem **should** offer users a way to contact author of post for specific questions. <sup>42</sup>
7. A Post **must** only have 1 topic assigned to it. <sup>43</sup>
8. The system **must** allow a Topic have multiple Posts. <sup>44</sup>

---

<sup>29</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355047#p549501>

<sup>30</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355067#p549557>

<sup>31</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355063#p549553>

<sup>32</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355047#p549501>

<sup>33</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355047>

<sup>34</sup>13/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355039#p546189>

<sup>35</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355151#p549485>

<sup>36</sup>04/11/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355067#p554135>

<sup>37</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355071#p549561>

<sup>38</sup>24/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=357789#p550055>

<sup>39</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355057#p549547>

<sup>40</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355055#p549545>

<sup>41</sup>24/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=357789#p550055>

<sup>42</sup>24/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=357789#p550055>

<sup>43</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355043#p549491>

<sup>44</sup>22/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355043#p549491>



## 12. Client requirements

1. A Client **must** have key information including Company name, Client Representative, Office Address, and Contact Information. <sup>45</sup>
2. The system **must** allow a new client to be added.

## 13. System Requirements

1. The system **must** have a responsive design that will cater for different platforms and screen sizes. <sup>46</sup>
2. The system **must** be able to be accessed 24 hours a day.
3. A user **should** be directed to the employee dashboard after logging in.
4. The system **must** be accessed via a dedicated web address.
5. The system **must** follow the GDPR regulations.

---

<sup>45</sup>24/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355047#p550039>

<sup>46</sup>11/10/2022 <https://learn.lboro.ac.uk/mod/forum/discuss.php?d=355077#p545293>