Report 1: Team’s understanding of client’s requirements

Each team members contribution

|  |  |
| --- | --- |
| Team member | Contribution |
| Josh Blythe | Created account page,  login page,  navbar page,  settings page  Invite member of staff |
| Damian Barczak | View an individual team page,  Team leader dashboard page  View employee tasks |
| Harvey Strand | Wrote this report.  Created the Individual post and replies page |
| Freddie Bailey | View posts page  View topics page |
| James Lamont | Create new post,  Created footer,  created assign tasks,  create project |
| Thomas L’Estrange | Created manager’s dashboard,  Create topic page  Created Employee dashboard |

System overview

A productivity management sub-system helps Managers to see all the teams are progressing and from those teams can see each individual employee’s tasks. Team managers can see how their team is progressing overall and can see each employees’ tasks and how they are progressing with each. Finally, each employee can see their tasks. Also, every user can create posts and reply to the posts to share knowledge and ask questions about problems in the company. In this case user refers to anyone using the system whether this be an employee, team manager or manager.

Listing of client’s requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number | Functionality | Where this is used | How it will be used | Functionality approved by | Extra Notes |
| 1. *Login and inviting users* |  |  |  |  |  |
| 1.1 | Every system user can invite another user to the system | Sign up page | An existing employee will have a code in their settings menu which they will give to a new employee | Is it only admins or managers that can invite new employees to the system?  -"Every employee can do this." |  |
|  | One email address can only be registered to one user account | Sign up page | The system will check if a valid email address has signed up before, if this is the case an error message will display saying “already signed up” | “No member of staff should be allowed to have more than one account on the system”.  -requirements documentation | Also, increases account security and stops duplication of data.  EG: May become a problem if a team leader may need to set a task to an employee with two accounts |
|  | Employees are only accepted if they have a verified email address | Sign up page | During the sign up an account can only be created if the email is verified. The user will be notified if the email they have is invalid and won’t let them sign up. | Is it okay for the admins to add emails to a green list which can register someone to invite them to the system, and then this enables the new user to create an account (and password) with said email?  Any attempts to register with a non-verified email is blocked. The emails can have a timestamp so that invites expire.  "What we want is that employees are invited to the system by another employee, they can open the registration link and then use their company email along with their information, such as first name and surname to register on the system.  Since you are the experts in this matter, we will follow your lead on how to implement this."  “no external personnel should be allowed to register and create an account on the system”  -Requirements document |  |
| 1.2 | Flexible number of employees | Whole of the system | We will make sure that a variable number of employees will be able to use the system. | How many employees does your company have, admins, managers and other?  -"These numbers are flexible, please do not hardcode anything." | May need to discuss about scalability of the solution with the clients. |
| 1.2 | Managers assigning an admin role (temporary managers) to team leaders  May have to delete |  | A manager will have a manager code to assign new managers on the sign-up page | Can the single admin account create other admin accounts?  -"For now, we don't need an admin account, just to be able to assign the admin role to managers, and team leaders so that they can do different things with the system." |  |
| 1.3 | Account security | Sign-up page | We will use validation checks that ensure that passwords aren’t the same as the username, common passwords can’t be used when creating the account. | What standards need to be in place to provide sufficient individual account security (so that no individual can be exploited).  Some examples could be (preventing common passwords, no same username as password, providing password advice before creation)  -"Please adhere to industry standards. All communications and data storage must be secure and not vulnerable to any kind of attacks.  You are the experts in this matter, so we are happy to follow your suggestions. " |  |
| 1.3 | Password security | In the sign up page | In terms of industry standards, using at least one upper case and one lower case letter as well as a number and at least 8 characters is industry standard so this will be used. | Would you classify this as a strong password (one upper, one lower, one special, one number, minimum 8 characters) 3  -"Regarding password requirements, please adhere to industry standards." |  |
| 1. *Users and permissions* |  |  |  |  |  |
| 2.1 | A manager can create a project, assign a team leader and create tasks | Manager’s dashboard page |  | 21  -"The way it works in our company is that a manager creates a project, assigns a team leader, and then the manager or the team leader, create tasks.  These tasks get then allocated to employees and once an employee is allocated a task in a project, they are part of the team, if they no longer have active tasks on the project, they are not part of the team.  Managers can do everything. Team leaders can only control aspects of their own project, they can't assign other team leaders, and they have no permissions outside the scope of their project.  For now, we don't need an admin account, just to be able to assign the admin role to managers, and team leaders so that they can do different things with the system." |  |
|  | Managers can see all the teams and a team manager can only see their team |  |  | Which permission level of users (admin or manager or other) should access how well project tasks are allocated and progressing. 21  -"All the managers and a given team leader." |  |
|  | A manager can allocate tasks to employees |  |  | “…manager or the team leader, create tasks.  These tasks get then allocated to employees and once an employee is allocated a task in a project” |  |
|  | A team leader can allocate tasks to employees |  |  | “…manager or the team leader, create tasks.  These tasks get then allocated to employees and once an employee is allocated a task in a project” |  |
|  | A team leader needing to allocate all current tasks to employees |  |  | By sufficiently resourced do you refer to how many employees are assigned to each task, and this mean each task should be allocated a people needed/ suspected time to complete?  -"We mainly focus on team size and man hours needed to complete the task/project. Yes, we want to allocate all the current tasks to the employees." |  |
| 1. *Tasks* |  |  |  |  |  |
| 3.1 | Tasks having the ability to have a time requirement | Employee dashboard to show tasks | Option to add a time requirement when creating a task | Do tasks have time constraints? 2  -"Usually yes." |  |
| 3.2 | Tasks being allocated to an employee | Employee dashboard |  | “…manager or the team leader, create tasks.  These tasks get then allocated to employees” |  |
| 1. *User’s Dashboards* |  |  |  |  |  |
| 4.1 | Employee dashboard containing the employees’ tasks |  |  | “…assist our employees with managing their daily tasks”.  From requirements document |  |
| 4.2 | manager’s dashboards showing tasks for teams and individual |  |  | “…managing their daily tasks, for both of individuals and teams”.  From requirements document |  |
| 4.3 | Team leader’s dashboard showing each employee’s task in their team and the team managers tasks |  |  | Which permission level of users (admin or manager or other) should access how well project tasks are allocated and progressing. 21  -"All the managers and a given team leader." |  |
| 4.4 | Employee has a to-do list which they can add items to | Employee dashboard |  | “…our employees will be able to create a list of To‐do items”  Requirements document |  |
| 1. *Topics and posts* |  |  |  |  |  |
| 5.1 | All users can see what posts | On the posts page | Will select a topic and form the topic can see the posts | “Documenting knowledge and sharing it with the wider community in the company” |  |
| 5.2 | User creating a topic | On the create topic page | Topics will be created by any user as new topics may arise during the lifecycle of the software | Example topics include “Software Development”, “Software Issues”, and “Printing”  From requirements spec  Can any user create a topic?    -"We don't know how to best implement this, so we are open to suggestions." |  |
| 5.3 | Each topic will have posts under that topic | On the posts page | Having posts under a topic make searching for knowledge easier and faster |  |  |
| 5.4 | Ability for users to ask questions on the website and to ask questions | On the topics page, posts and individual posts and replies page | There’s a page for the topics which the user can interact with | “…documenting knowledge and sharing it with the wider community in the company”.  -Requirements document |  |
| 5.5 | A post containing at least text and the option to add an image | On the individual posts and replies page | The combination of pictures and text should make the post easy to understand | What requirements are there for posts (text, picture) ?2  -"It really depends on a specific topic/post, so this should be flexible." | If text description isn’t great for understanding of post => image should help  If image isn’t great for understanding of the post => text should help |
| 5.6 | Post reply via text | Individual post and replies page | A user can reply to a question asked or a useful piece of knowledge shared on a post | Can other people’s reply or add to others posts (upvoting etc) ?2    -"We are open to suggestions how to best design this." | May not need a system to influence which replies are at the top of the reply section as the number of replies won’t be a large amount. |
| 1. *Aesthetics* |  |  |  |  |  |
| 6.1 | Using bootstrap for CSS styles | Throughout the whole system |  | 34  -"There is no issue with your team using Bootstrap in the development of the system., so feel free to use this if you want to." | Saves development time and improves the aesthetics of the website |
| 6.2 | Using light themes for the aesthetics of the website | Throughout the whole system |  | Do you have a colour pallet that you would like us to use to match your companies image? (Examples from www.colorhunt.com)  -"We were hoping that you would provide us with different samples for colour themes and designs, matching the logo, but we definitely prefer lighter themes." | Will show the client a few different variations of colour schemes to see what they would like. |

Key for requirements specification:

Red: Key information from specification

Re: Our requirements

To whom it may concern,

We are a company, called Make‐It‐All, that makes extensive use of IT for all our activities. We are looking to develop a productivity and knowledge management system for our internal use. We urgently need the productivity management sub‐system to assist our employees with managing their daily tasks, for both of individuals and teams, that they may encounter with their projects. At the moment, each individual or team employs casual approaches to manage their daily tasks. This is unsatisfactory as it means it is very difficult to track how the projects are progressing.

For the same reason we also urgently need the knowledge management sub‐system to assist with documenting knowledge and sharing it with the wider community in the company. The knowledge can be technical or non‐technical. The technical knowledge mainly includes software/hardware configurations, technical issues and solutions to the technical issues. Non‐ technical knowledge is generally about admin tasks, such as “How to order printing papers”.

We would like you to develop a software to run the productivity and knowledge management system. To assist in the maintenance of the systems, we request you produce this using JavaScript and/or PHP programming languages with the MySQL database. The software needs to be able to handle the following operations: The new system should have a To‐do list in which our employees will be able to create a list of To‐do items. There should also be a manager’s dashboard so that the managers or team leaders can keep track of the progression of the project they are responsible for. The new system should be able to show how many tasks a team member is currently working on so that the work load could be better balanced. Users will be allowed to create “Topics” for specific subject areas. Example topics include “Software Development”, “Software Issues”, and “Printing”, etc. For each topic, the users will need to be able to create and share “Posts” relevant to the chosen topic.

We want the access to the system to be managed. A member of staff must register to gain access to the system. Their usernames can only be their staff email addresses and their accounts must be protected by strong passwords. There must of an option for an existing member to invite another member of staff to join the system. To improve manageability, no member of staff should be allowed to have more than one account on the system. And no external personnel should be allowed to register and create an account on the system. This system will need to enable us to see how well the tasks are allocated, how well the projects are progressing overall, whether the projects are sufficiently resourced to solve problems in an acceptable time, and whether there are subject areas where training should be given to employees. We would like suitable aspects of data protection considered so the system cannot be exploited to target specific individual.

We hope you will undertake the production of this software for us. I look forward to hearing from you.

**List of questions we have asked**

1) Client Admin Operations Manager:

.Is it only admins or managers that can invite new employees to the system?

-"Every employee can do this."

.Can any user create a topic ?

-"We don't know how to best implement this, so we are open to suggestions."

.How many employees does your company have, admins, managers and other.

-"These numbers are flexible, please do not hardcode anything."

.Can the single admin account create other admin accounts?

-"For now, we don't need an admin account, just to be able to assign the admin role to managers, and team leaders so that they can do different things with the system."

.Do you have a colour pallets that you would like us to use to match your companies image. Show examples from www.colorhunt.co

-"We were hoping that you would provide us with different samples for colour themes and designs, matching the logo, but we definitely prefer lighter themes."

.Which permission level of users (admin or manager or other)should access how well project tasks are allocated and progressing.

-"The way it works in our company is that a manager creates a project, assigns a team leader, and then the manager or the team leader, create tasks.

These tasks get then allocated to employees and once an employee is allocated a task in a project they are part of the team, if they no longer have active tasks on the project, they are not part of the team.

Managers can do everything. Team leaders can only control aspects of their own project, they can't assign other team leaders, and they have no permissions outside the scope of their project.

For now, we don't need an admin account, just to be able to assign the admin role to managers, and team leaders so that they can do different things with the system."

2) Client Project Manager:

. Can a post be assigned to multiple topics ?

-"We are open to suggestions how to best design this."

. What requirements are there for posts (text, picture) ?

-"It really depends on a specific topic/post, so this should be flexible."

.Can other people reply or add to others posts (upvoting etc) ?

-"We are open to suggestions how to best design this."

.Is it okay for the admins to add emails to a green list which can register someone to invite them to the system, and then this enables the new user to create an account( and password) with said email?

Any attempts to register with a non-verified email is blocked. The emails can have a timestamp so that invites expire.

-"What we want is that employees are invited to the system by another employee, they can open the registration link and then use their company email along with their information, such as first name and surname to register on the system.

Since you are the experts in this matter, we will follow your lead on how to implement this."

.Do employees set themselves tasks, and can managers set tasks to other employees ?

-"I think this question was already answered before by my colleague Alice."

.Do tasks have time constraints?

-"Usually yes."

.Should the managers dashboard show the extent of individuals tasks, or simply the quantity of tasks set to each user?

-"We are open to suggestions how to best implement this."

.Do you have a colour pallets that you would like us to use to match your companies image. Show examples from www.colorhunt.co ?

-"We were hoping that you would provide us with different samples for colour themes and designs, but we definitely prefer lighter themes."

.Which permission level of users (admin or manager or other)should access how well project tasks are allocated and progressing?

-"All the managers and a given team leader."

.How would we have data on if projects are sufficiently resourced?

-"Please incorporate some placeholder numbers into the prototype."

.describe how to measure how well a project is allocated?

-"I'm sorry, I don't understand the question."

.By sufficiently resourced do you refer to how many employees are assigned to each task and this mean each task should be allocated a people needed/ suspected time to complete?

-"We mainly focus on team size and man hours needed to complete the task/project. Yes, we want to allocate all the current tasks to the employees."

.Who decides whether training is needed to complete the task?

-"This will be handled directly by managers or team leaders outside of the system."

.As per request, we have found some light palettes we think would be suitable to the development. Which of the following do you prefer?

-"It'd be good if you show us these options during the prototype presentation we have soon."

.Are you happy with the attached logins screen design?

-"It'd be good if you show us these options during the prototype presentation we have soon."

3) Client Technical Specialist:

. Would you classify this as a strong password (one upper, one lower, one special, one number, minimum 8 characters)?

-"Regarding password requirements, please adhere to industry standards."

.What standards need to be in place to provide sufficient individual account security (so that no individual can be exploited)?

Some examples could be (preventing common passwords, no same username as password, providing password advice before creation)

-"Please adhere to industry standards. All communications and data storage must be secure and not vulnerable to any kind of attacks.

You are the experts in this matter, so we are happy to follow your suggestions. "

.Do you refer to any resources other than humans. E.g software?

-"I'm sorry, I don't understand the question."

.Are you okay with us using bootstrap for development. On a managers board the dashboard shows albums of users in which you they click a user it displays individual detail?

-No response

4) Our company technical advisors:

.Are you okay with us using bootstrap for development. On a managers board the dashboard shows albums of users in which you they click a user it displays individual detail?

-"There is no issue with your team using Bootstrap in the development of the system., so feel free to use this if you want to."

5) Our companies senior manager:

None