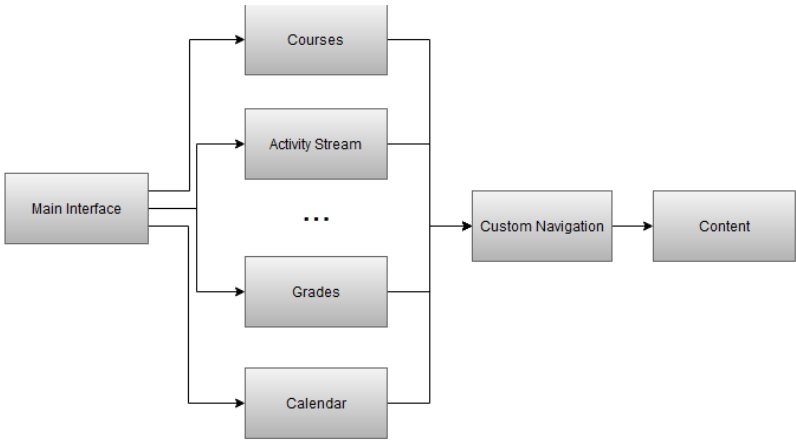| Section	Description
1 Introduction	
1.1 Purpose	Efficient utilisation of resources and management of teams and their synergies.
1.2 Scope	a) Team Utilisation Monitor b) The product will manage teams; Evaluate team performance,Evaluate team members,manage resources,allocate resources and work. c) Objectives:Improve team management and resource utilisation Goals: Have better performing teams. Benefits: Identify strengths of teams and their members;Effective resources utilisation.
1.3 Definitions, acronyms, and abbreviations	TUM- Team utilisation monitor
1.4 References	None
2 Overall Description	
1 Product Perspective	
2.1.1 System Interfaces	
2.1.2 User Interfaces	Sign Up page,Login Page,Team page,Team performance report,Individual Performance report,Task allocation page,Team Allocation page,Resource Allocation Page, An Individual's summary Page.
2.1.3 Hardware Interfaces	None
2.1.4 Software Interfaces	API for getting data to and from the system from the database.
2.1.5 Communication Interfaces	Notifications
2.1.6 Memory	Unknown

2.1.7 Operations	Team allocation,Resource allocation,Individual performance analysis,Team performance analysis
2.1.8 Site Adaptation	The site should be able to be viewed on a desktop, laptop, or phone
2.2 Product Functions	**Core functionality:** -Manage Resources efficiently -Should be able to present information using graphs,charts and reports. -Work allocation -Should be mobile reactive **Team functions**: -Team allocation -create an analysis based on team performances **Individual functions:** -Identify best team combinations based on their skill sets -create an analysis based on individual performance and team contribution **Additional functionality:** -Should provide a tutorial for first time users.
2.3 User Characteristics	An individual(employee,employer),A Team
2.4 Constraints	-System should not make use of any proprietary technologies -System should be platform independent aside from platform dependent plugins i.e doesn't matter what OS you are using -System servers should be easy to install and start an instance of (Docker, Kubernetes and similar)
2.5 Assumptions and Dependencies	The users have some degree of computer literacy.
3 Specific Requirements	
3.1 External Interface Requirements	

3.2 Functional Requirements	(We are listing only the high level requirements here and thus, no breaking down of the primary requirements happens)

3.2.1 Functional Requirements	● R1: The system should provide team or individual utilisation measured in comparison to the expected project being worked on.
	
	● R2: The system should use metrics such as time taken to complete a project, Number of Resources used to complete the project and the amount of external help required to complete the project to provide an effective analysis on individuals and the teams.(team analysis and individual analysis)
	
	● R3: The system should be able to generate teams based on past data- gathered from the data analysis
	
	● R4: The system should provide a dashboard for the admin. It must contain this information, in graphical format:
	  ○ Number of members(active/non-active)
	  ○ Number of teams
	  ○ Number of projects
	  ○ Overall utilisation
	  ○ Average utilisation
	
	● R5: The system should be able to present the following data to individual users (individual page) in graph form or text form:
	  ○ Utilisation
	  ○ Skills
	  ○ Contact details
	  ○ Company
	  ○ Project
	  ○ Availability (e.g if utilisation is at 50%, then the person is available)
	● R6: The system should be able to provide a report based on the data.
	  ○ The system should provide a report based on the admin dashboard
	  ○ The system should provide a report based on the individual's data.
	
	● R7: Provide an interactive web client that is fully mobile compatible(responsive web application)

	● R8: The system should have a user management framework
	  ○ The system should be able to register/login an individual or admin
	    ■ Admins register directly
	    ■ Regular users must use an invite code sent to their emails
	
	● R9: The system should allow the Admin to do the following functions:
	  ○ Create and register a company (this is done at the registration of the admin)
	  ○ Add users to that company
	  ○ Remove users from that company
	  ○ Create project and assign workers to it
	  ○ Create teams and assign members to it.
	  ○ Assign positions to members

3.3 Performance Requirements	N/A
3.4 Design Constraints	(This is just a description of the constraints listed above)
3.5 Attributes	-Scalable, should allow for companies of varying sizes with acceptable performance -Secure, should be able to meet all GDPR requirements and keep data safe using proper login and encryption -Reliable, fault tolerance and loss of server connection must be considered -Usability, should provide graphical resources(graphs, charts) to present data to the end user.
3.6 Additional requirements	i. Microsoft Teams/Slack plugin (Teams preferred) ii. Containerize the application into a mobile application that can be used across devices without changing the code base iii. Source required skills and trends from an external source to the developed application
3.6.1 Database	(A work in progress!)
3.6.2 Operations	
3.7 User Stories	● Admin should be able to register and create profile ● Admin should be able to create and register a company. ● Admin should add users ● Admin should remove users from the system. ● Admin should be able to create projects for their teams

	- Admin should be able to create teams and assign members. - Admin should be able to assign positions to the members. - Admin should be assign projects to teams. - Admin should be able to see: - The members of an organisation. Each member should display - Their utilisation - Name, surname, email - Skills - Teams - Projects - A dashboard giving him an overview of the organisation. It should include: - Number of members.(Active and non-active) - Number of teams and what they are working on. - Number of projects. - Overall utilisation - User should be able to see: - His skills - His Contact details - Projects - Company - User should be able to register using an invite from the admin.