

Our database will have 5 tables: Users, Workspaces, Workspace_User, Boards, and Tasks.
The cardinalities are as follows:

The connections and cardinalities are listed in the following table:

Origin	Target	Cardinality	FK
Users	Workspaces_Users	One to many	user_id
Users	Tasks	Zero/one to zero/many	user_id
Tasks	Users	Many to one	user_id
Tasks	Boards	Many to one	board_id
Boards	Tasks	One to zero/many	board_id
Boards	Workspaces	Many to one	workspace_id
Workspaces	Boards	One to zero/many	workspace_id
Workspaces	Workspaces_Users	One to many	workspace_id
Workspaces_Users	Workspaces	Many to one	workspace_id
Workspaces_Users	Users	Many to one	user_id

The table Workspaces_Users exists to represent the Many to Many relationship between Users and Workspaces, as a user can be a member of many workspaces and each workspace can have many users.

The ERD diagram can be found below:

