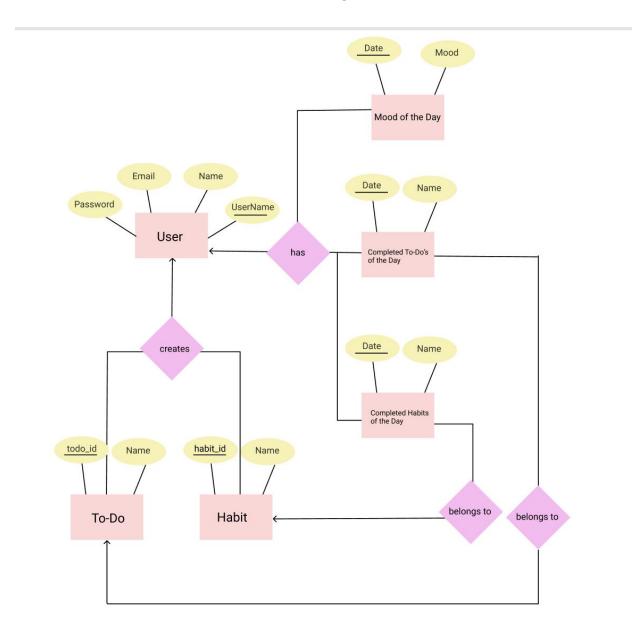
Data Model & DB Design

CS 157A - Team 11

Team Members: Ryongji Park Manjari Maheshwari Lalitha Donga

E/R Diagram



Entity Set and Relationships

User makes Habits

A user will be registered with the site and be able to create a habit tracker by setting
habits that they want to accomplish every day. Habits include mostly daily or weekly
recurring tasks, such as things you find enjoyable, responsibilities, or things you want to
do (like stretch in the morning, write blog post, exercise).

• User makes To Do's

 A user will be registered with the site and be able to create a habit tracker with a todo list by setting to-do's that they want to complete by the end of the month that they can add and delete as they wish. A to-do would be full of spontaneous tasks that arise.

• User has Mood of the Day

Each day, the user selects what their mood was (happy, stressed, sad, tired, etc). A report
will be generated at the end of the month comparing the dates that user's had bad moods
with dates that they didn't complete habits.

• User has Completed To Do of the Day

Everytime a user completes a to-do from the to-do list, the to-do will be will be stored in the completed to-do of the day database to use later when generating the report which includes displaying the number of to-do's they completed for the month along with the dates in which the user was most productive with completing to-do's.

• User has Completed Habits of the Day

• The habits that the user completed for each day will be stored in the table to use later when making patterns between the user's habits and their daily moods. We will compare the dates that user's had bad moods with dates that they didn't complete habits.

• Completed To Do's of the Day belongs to To-Do

The completed to do's of the day comes from the total to-do's (all to-do's created when
making the habit tracker). Each time a user checks off a to-do, the to-do will be stored
into the completed todos of the day table.

• Completed Habits of the Day belongs to Habit

• The completed habits of the day come from the total habits (all habits created when making the habit tracker). Each time a user checks off a habit from the habit tracker (by selecting the corresponding box), the habit will then be stored into the completed habits of the day tables.

Database Schema and Tables

Users(username: String, email: String, password: String, name: String)

Name	Username	Password	Email
Clarke Walker	clarke.w	Love000	Clarke.walker@gmail.com
Meredith Grey	meredith.gray	Love100	Meredith.grey@gmail.com
Alex Karev	alex.karev	Love200	Alex.karev@gmail.com
Isobel Stevens	Izzy123	Love300	Izzy123@gmail.com
George O'Malley	georgie	Love400	georgie41@gmail.com
Steve Harrington	stevie01	Love500	steve01@gmail.com
Stephen King	scaremaster	Spook100	scaremaster@gmail.com
Jack Murphy	jacktheripper	Kill100	jackther@gmail.com
Michael Myers	mike.meyers	Kill200	mikey@gmail.com
Josephine Lockehart	josiepoo	Love600	josiepoo@gmail.com
Tony Stark	iamironman	Love3000	tony.stark@gmail.com
Arya Stark	nofacewoman	Kill300	agirlhasnoname@gmail.com
Steve Rogers	captmurica	Just100	americasass@gmail.com
Peter Parker	friendlyspider	Cute100	idontfeelgood@gmail.com
Natasha Romanoff	blackwidow	Kill400	shouldvebeenhawkeye@gmail.c

MoodOnTheDay(mood: String, date: int)

Mood	Date
Нарру	10/1/2019
Sad	10/2/2019

Stressed	10/3/2019
Нарру	10/4/2019
Nervous	10/5/2019
Neutral	10/6/2019
Tired	10/7/2019
Productive	10/8/2019
Productive	10/9/2019
Нарру	10/10/2019
Neutral	10/11/2019
Nervous	10/12/2019
Stressed	10/13/2019
Stressed	10/14/2019
Productive	10/15/2019

CompletedTodos(<u>date</u>: int, name: String)

Date	Name
10/1/2019	Learn Javascript
10/2/2019	Pay Bills
10/3/2019	Finish HW for CS 157a
10/4/2019	Go to office hours
10/5/2019	Return library books
10/6/2019	Get groceries
10/7/2019	Write in planner
10/8/2019	Learn HTML
10/9/2019	Learn CSS
10/10/2019	Finish HW for CS 149

10/11/2019	Get groceries
10/12/2019	Learn React
10/13/2019	Check out book from library
10/14/2019	Update google calendar
10/15/2019	Do HW for CS 152

CompletedHabits(<u>date</u>: int, name: String)

Date	Name
10/1/2019	Exercise
10/2/2019	Floss
10/3/2019	Sleep for 7-9 hours
10/4/2019	Meditate
10/5/2019	Take Vitamins
10/6/2019	No Junk Food
10/7/2019	Exercise
10/8/2019	Exercise
10/9/2019	Floss
10/10/2019	Sleep for 7-9 hours
10/10/2019	Meditate
10/10/2019	Meditate
10/11/2019	No Junk Food
10/11/2019	Exercise
10/11/2019	Sleep for 7-9 hours

Todos(todo_id: String, name: String)

Todo_id	Name
13ksl31	Clarke Walker
781sks2	Meredith Grey
242klsf32	Alex Karev
1331kfl1	Isobel Stevens
4266jlks9	George O'Malley
329hgsrls9	Steve Harrington
42nls3	Stephen King
ssl13gkr	Jack Murphy
gkjsk2891	Michael Myers
42kgsl2	Josephine Lockehart
4421gs0	Tony Stark
4221s82g	Arya Stark
2429gjs4	Steve Rogers
lsgkj82gs	Peter Parker
1115lsg3	Natasha Romanoff

Habits(<u>habit_id: String</u>, name: String)

Habit_ID	Name
13ksgsl31	Exercise
781sgks2	Floss
242khlsf32	Sleep for 7-9 hours
1331kfsl1	Meditate
4266jldks9	Take Vitamins
3289hgsrls9	No Junk Food

42nlgs3	Exercise
ssl131gkr	Exercise
gkjsks2891	Floss
424kgsl2	Sleep for 7-9 hours
4421g8s0	Meditate
4221gs82g	Meditate
2429gjls4	No Junk Food
lsfgkj82gs	Exercise
11135lsg3	Sleep for 7-9 hours

hasCompletedToDo(username: String, date: int)

Name	Date
clarke.w	10/1/2019
meredith.gray	10/2/2019
alex.karev	10/3/2019
Izzy123	10/4/2019
georgie	10/5/2019
stevie01	10/6/2019
scaremaster	10/7/2019
jacktheripper	10/8/2019
mike.meyers	10/9/2019
josiepoo	10/10/2019
iamironman	10/11/2019
nofacewoman	10/12/2019
captmurica	10/13/2019
friendlyspider	10/14/2019

blackwidow	10/15/2019
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hasCompletedHabits(username: String, date: int)

Name	Date
clarke.w	10/1/2019
meredith.gray	10/2/2019
alex.karev	10/3/2019
Izzy123	10/4/2019
georgie	10/5/2019
stevie01	10/6/2019
scaremaster	10/7/2019
jacktheripper	10/8/2019
mike.meyers	10/9/2019
josiepoo	10/10/2019
iamironman	10/11/2019
nofacewoman	10/12/2019
captmurica	10/13/2019
friendlyspider	10/14/2019
blackwidow	10/15/2019

hasMood(username: String, date: int)

Username	Date
clarke.w	10/1/2019
meredith.gray	10/2/2019
alex.karev	10/3/2019

Izzy123	10/4/2019
georgie	10/5/2019
stevie01	10/6/2019
scaremaster	10/7/2019
jacktheripper	10/8/2019
mike.meyers	10/9/2019
josiepoo	10/10/2019
iamironman	10/11/2019
nofacewoman	10/12/2019
captmurica	10/13/2019
friendlyspider	10/14/2019
blackwidow	10/15/2019

makesToDo(<u>username</u>: String, <u>todo_id</u>: String)

Username	todo_id
clarke.w	13ksgsl31
meredith.gray	781sgks2
alex.karev	242khlsf32
Izzy123	1331kfsl1
georgie	4266jldks9
stevie01	3289hgsrls9
scaremaster	42nlgs3
jacktheripper	ssl131gkr
mike.meyers	gkjsks2891
josiepoo	424kgsl2
iamironman	442lg8s0

nofacewoman	422lgs82g
captmurica	2429gjls4
friendlyspider	lsfgkj82gs
blackwidow	11135lsg3

makesHabit(<u>username</u>: String, <u>habit_id</u>: String)

Username	Habit_id
clarke.w	13ksgsl31
meredith.gray	781sgks2
alex.karev	242khlsf32
Izzy123	1331kfsl1
georgie	4266jldks9
stevie01	3289hgsrls9
scaremaster	42nlgs3
jacktheripper	ssl131gkr
mike.meyers	gkjsks2891
josiepoo	424kgsl2
iamironman	442lg8s0
nofacewoman	422lgs82g
captmurica	2429gjls4
friendlyspider	lsfgkj82gs
blackwidow	11135lsg3

$belongsToHabit(\underline{date}: int, \underline{habit_id}: String)$

Date	habit_id
10/1/2019	13ksgsl31
10/2/2019	781sgks2

10/3/2019	242khlsf32
10/4/2019	1331kfsl1
10/5/2019	4266jldks9
10/6/2019	3289hgsrls9
10/7/2019	42nlgs3
10/8/2019	ssl131gkr
10/9/2019	gkjsks2891
10/10/2019	424kgsl2
10/11/2019	442lg8s0
10/10/2019	422lgs82g
10/11/2019	2429gjls4
10/11/2019	lsfgkj82gs
10/11/2019	11135lsg3

belongsToToDo(<u>date</u>: int, <u>todo_id</u>: String)

Date	Todo_ID
10/1/2019	13ksgsl31
10/2/2019	781sgks2
10/3/2019	242khlsf32
10/4/2019	1331kfsl1
10/5/2019	4266jldks9
10/6/2019	3289hgsrls9
10/7/2019	42nlgs3
10/8/2019	ssl131gkr
10/9/2019	gkjsks2891
10/10/2019	424kgsl2

10/11/2019	442lg8s0
10/12/2019	422lgs82g
10/13/2019	2429gjls4
10/14/2019	lsfgkj82gs
10/15/2019	11135lsg3