Pseudocode

**User register – REQ1**

BEGIN

INPUT INusername

INPUT INpassword

Validate user inputs

Add new record into user database with username 🡨 IPusername, password 🡨 IPpassword, name 🡨 IPusername, timerType 🡨 1, timerNotif 🡨 1, timerLen 🡨 30

Session started

User is redirected to main page

END

**User login – REQ2**

BEGIN

GET username

GET password

INPUT INusername

INPUT INpassword

IF username = INusername AND password = INpassword

Session started

User is redirected to main page

ELSE

Display “Username or password is incorrect. Please try again.”

ENDIF

END

**User logout – REQ3**

BEGIN

Session ended

User is redirected to the login page

END

**Timer and break notifications – REQ5**

BEGIN

GET timerType

GET timerNotif

IF timerType = 1

IF countdown timer reaches 0

IF timerNotif = 1

Play sound

ELSE

Display alert “Timer’s up!”

ENDIF

ENDIF

ENDIF

END

**Adding subjects/tasks – REQ6,**

**Settings – Manage subjects/tasks - REQ11**

BEGIN

INPUT subject

Validate user input

Add subject into database

i 🡨 1

GET ID

GET number of subjects/tasks in database where userID = ID

REPEAT

//displays current subjects in database

GET subject where SubID = i

IF subject has userID = ID

Display subject

ENDIF

i 🡨 i + 1

UNTIL i > number of subjects/tasks in database where userID = ID

END

**Deleting subjects/tasks – REQ7,**

**Settings – Manage subjects/tasks - REQ11**

BEGIN

GET subject selected

Display alert “Are you sure you want to delete ‘subject selected’?”

IF user confirms

Delete subject selected from database

i 🡨 1

GET ID

GET number of subjects/tasks in database where userID = ID

REPEAT

//displays current subjects in database

GET subject where SubID = i

IF subject has userID = ID

Display subject

ENDIF

i 🡨 i + 1

UNTIL i > number of subjects/tasks in database where userID = ID

ENDIF

END

**Functional timer – REQ4,**

**Recording time spent on subject/task - REQ8**

BEGIN

GET subject selected

GET button pressed

GET timerLen

GET timerType

started 🡨 0

timerOn 🡨 0

timeSpent 🡨 0

IF started = 0

IF timerType = 1

Set timer to timerLen

ELSE

Set timer to 0

ENDIF

started 🡨 1

ENDIF

IF start button pressed AND timerOn = 0

startTime 🡨 time now

timerOn 🡨 1

IF timerType = 1

Continually decrease timer

ELSE

Continually increment timer

ENDIF

ENDIF

IF stop button is pressed AND timerOn = 1

Stop timer

timerOn 🡨 0

endTime 🡨 time now

timeDiff 🡨 endTime – startTime

timeSpent 🡨 timeSpent + timeDiff

ENDIF

IF reset button is pressed

IF timerOn = 1

Stop decreasing/incrementing timer

timerOn 🡨 0

endTime 🡨 time now

timeDiff 🡨 endTime – startTime

timeSpent 🡨 timeSpent + timeDiff

ENDIF

Started 🡨 0

ENDIF

IF done button pressed

GET time

endTime 🡨 time now

timeDiff 🡨 endTime – startTime

timeSpent 🡨 timeSpent + timeDiff

todayDate 🡨 current date

IF timeSpent IS NOT EQUAL TO 0

Redirect user to timer done page

Display “Did you work on ‘subject selected’ for ‘timeSpent’?”

IF “yes” button pressed

time 🡨 time + timeSpent

ELSE

Display “Please input the time spent on the subject/task”

INPUT timeLen

Validate user input

time 🡨 time + timeLen

ENDIF

Update time in database as time for selected subject

Update today in database as todayDate for selected subject

ELSE

Display alert “You haven’t used the timer! Would you like to manually input the time spent instead?”

IF user confirms

Redirect user to timer done page

INPUT timeLen

Validate user input

time 🡨 time + timeLen

Update time in database as time for selected subject

Update date in database as todayDate for selected subject

ENDIF

Redirect user to main page

ENDIF

ENDIF

END

**Report – REQ9**

BEGIN

i 🡨 1

todayDate 🡨 current date

totalTime 🡨 0

GET ID

GET number of subjects/tasks in database where userID = ID

REPEAT

GET subject where SubID = i

IF subject has userID = ID

GET time for subject where date = todayDate

totalTime 🡨 totalTime + time

ENDIF

i 🡨 i + 1

UNTIL i > number of subjects/tasks in database where userID = ID

IF totalTime > 0

Display “Today you worked for: ‘totalTime’ minutes in total”

REPEAT

GET subject where SubID = i

IF subject has userID = ID

GET time from subject where date = todayDate

IF time > 0

Display “You have spent ‘time’ minutes on subject ‘subject’”

ENDIF

ENDIF

i 🡨 i + 1

UNTIL i > number of subjects/tasks in database userID = userID

ELSE

Display “No records available to show. Record the time on a subject/task today then check back here!”

ENDIF

END

**Tutorial – REQ10**

BEGIN

Display tutorial page

END

**Settings - Change timer preferences – REQ11**

BEGIN

GET timerType

GET timerLen

INPUT INtimerType

INPUT INtimerLen

INPUT INtimerNotif

Validate user inputs

IF timerType IS NOT EQUAL TO INtimerType

Update timerType in database as INtimertype

ENDIF

IF timerLen IS NOT EQUAL TO INtimerLen

Update timerLen in database as INtimerLen

ENDIF

IF timerNotif IS NOT EQUAL TO INtimerNotif

Update timerNotif in database as INtimerNotif

ENDIF

END

**Settings – Manage account – REQ11**

BEGIN

GET name

GET username

GET password

INPUT INname

INPUT INusername

INPUT INpassword

INPUT INsecondPass

Validate user inputs

IF INname is inputted AND IS NOT EQUAL TO name

Update name in database as INname

ENDIF

IF INusername is inputted AND IS NOT EQUAL TO username

Update username in database as INusername

ENDIF

IF INpassword is inputted AND IS NOT EQUAL TO password

IF INpassword = INsecondPass

Update password in database as INpassword

ELSE

Display “Passwords do not match!”

ENDIF

END