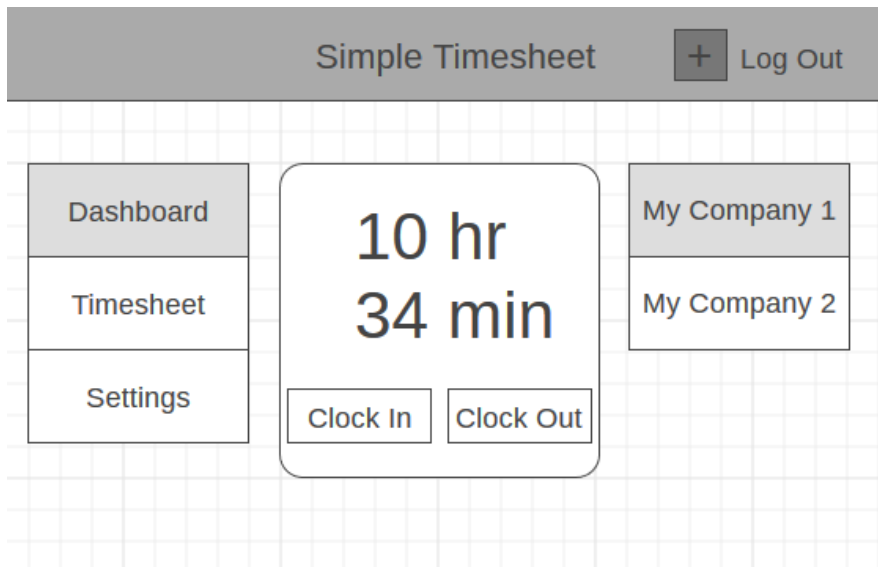**Name:** Sage Thomas

Title: Simple Timesheet

Project Summary:

A timesheet website for employees of a company to clock in and out. Each employee can login and view or update their timesheet. A manager can alter the times if a mistake is made. Total time for a pay period is automatically calculated. This timesheet will only be for one company. A SQL database will be used to store user data, but it can be downloaded in csv format for use in Excel.
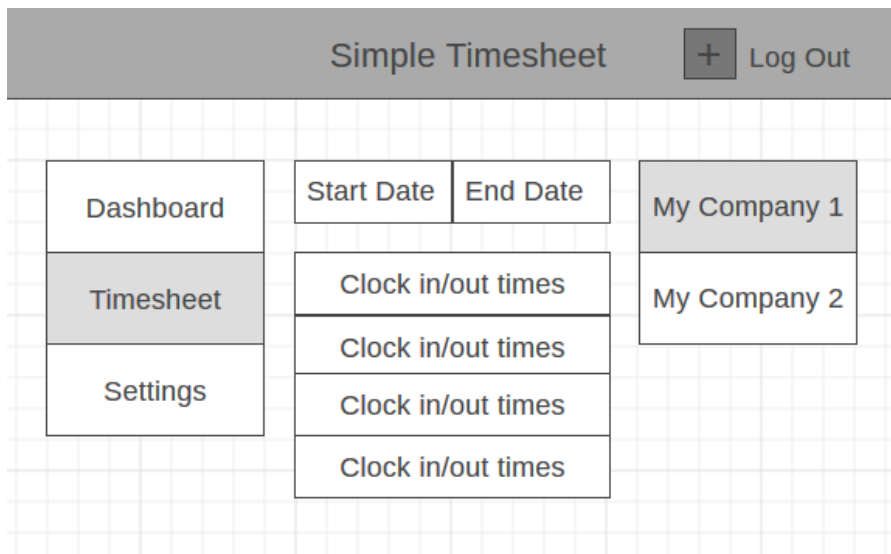
Project Requirements:

1	Can create a new user account with name, email, and password
2	Can create a new company
3	Can request other users to join company as employee or manager
4	User can have and join multiple companies
5	User can clock in and clock out
6	User can view their timesheet and hours
7	Manager/Admin can view all employees' timesheets and hours
8	Manager/Admin can edit timesheet
9	Manager/Admin can download timesheet(s) in csv format
10	Admin can delete company
11	Admin can set start and stop schedule of pay periods
12	Users can delete their accounts
13	Users can leave companies they joined

UI Mockups:

Simple Timesheet	+ Log Out

Dashboard	**10 hr**	My Company 1
Timesheet	**34 min**	My Company 2
Settings	Clock In Clock Out	

Navigation is on the left side. The user can select their current company on the right. The middle gives the current page's information. The top gives a button to log out and another to create a new company.

Simple Timesheet	+ Log Out

Dashboard	Start Date	End Date	My Company 1
Timesheet	Clock in/out times		My Company 2
Settings	Clock in/out times		
	Clock in/out times		
	Clock in/out times		

Class Diagram:

Owner

+manager: Manager

+addEmployee(u: User): Employee
+addManager(e: Employee): Manager
+deleteEmployee(e: Employee)
+deleteManager(m: Manager)
+demoteManager(m: Manager)
+deleteCompany()

Manager

+employee: Employee

+deletePunch(p: Punch)
+addPunch(u: User p: Punch)

Employee

+user: User
#company: Company

+punch(d: DateTime): Punch

Company

+id: int
+name: String
+owner: Owner
+managers: List(Manager)
+employees: List(User)
-payPeriods: List(PayPeriod)

+getPayPeriod(d: Date e: Employee)
+getPayPeriods(es: List(Employee)): List(PayPeriod)

User

+id: int
+name: String
+email: String
-salt: String

authenticate(p: String): bool
createCompany(c: String): Company
acceptNewCompany(c: Company)

PayPeriod

+id: int
+startDate: Date
+endDate: Date
punches: List(Punch)

getTime(e: Employee): String

Punch

+user: User
+punchIn: DateTime
+punchOut: DateTime

+setPunchIn(d: DateTime)
+setPunchOut(d: DateTime)