

Petroleum Company

System Project Description:

Aim:

To increase the efficiency of operation in the company

This system will be used for time scheduling and task distribution and operation management.

This system will not be fully involved in the production process.

List of team members:

Project Manager:

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Team Members:

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Functional requirements:

1 - Managing insurance

Managing the interaction between the financial department and insurance organization

Managing the communication and editing the employee salaries

2 - Managing tool requests by Eng

Manages the interaction between the Engineers, Lab Technicians and the industry development department.

Enables Engineers, Lab technicians to request tools.

3 - Managing shift distribution

Manages the distribution of shifts form shift locations to shift hours.

Enables departments to schedule the shifts for employees.

4 - Displaying The salaries of all employees

Enables the employee to see a detailed description of their salaries.

5 - Managing The salaries of all employees

Ensures that the salaries of all employees is calculated correctly based on the contract or days of work.

6 - Managing Employee requests

Enables the employees to make requests out of the ordinary to ensure their satisfaction in the workplace.

7 - Managing Task Distribution

Enables departments to assign tasks to the employees.

8 - Determining workplace of employees

Enables the employees to see the names and professions of all the colleagues in their team.

Determines the Workplace of employees.

9 - Managing hiring requests

Facilitates the communication between departments and the hiring agencies and the company manager to enables departments to hire new employees.

10- Managing maintenance request

Facilitates the communication between the Employees and the maintenance department to fix and malfunctioning machines.

11- Displaying Shift Time

Display when the shift starts and ends for the employees.

12- Displaying Shift Location

Displays the location of the shift to the employee.

13- Classification of produced waste

Stores the amount of waste and its classification in the database based on the submitted report by the Waste department.

14- Displaying the amount of waste produced

Displays the amount of waste and its classification to the related employees.

15- Managing wastes recycling

Facilitates the task distribution to employees dealing with waste sending them specific instructions to follow the standards of waste recycling.

16- Managing lab requests

Enables the lab technicians to Make request the ensure the best results.

17- Displaying lab reports

Displays lab report to all related employees.

18- Managing employee promotions

Ensures that the promoted employees' salary and position is edited in the database.

19- Managing employee transportation

Schedules the time and location for the transportation of employees.

20- Managing work teams

Facilitates teaming of employees under one group to ease the distribution of tasks.

21- Comparing production with prediction

Calculating the production from the submitted report from the production department and comparing it with the predicted values to insure the quality of work .

22- Displaying legal issues to the lawyers

Ensures lawyers receive and sees all the legal papers related to the Company.

23- Applying legal actions

Enables the department to put fines and suspend employees from the company on any breach of contract.

24- Displaying The company's financial position

Enables the accountants to see the company's financial decisions to facilitate the buying of new equipment and hiring on new employees.

25- Displaying maintenance report

Enables the maintenance department to see all the maintenance request submitted by the employees.

26- Accessing of cameras

Enables the security department to take control of all cameras in the vicinity to ensure the safety of the location.

27- Monitoring Work entry and departure times for employees

Ensures that the workdays and work hours are calculated correctly to pay the employee salaries correctly and fairly.

28- User login

Ensures that only company employees can login into the system.

Non-Functional Requirements:

Security:

- protection of the employee's personal data
- ensuring only employees of the same department can see the reports submitted by their colleagues.

Usability:

- The employees should easily understand the system layout.
- uploading and reviewing reports should be easily done.

Accessibility:

- the system should be accessible from all devices (computers (Mac OS, Windows, Linux), smartphones (Android, IOS))

Availability:

- the system should be available for a large portion of the year (99.999% of the year)

Maintainability:

- the system should be easily maintained to ensure low downtimes.

Scalability:

- the system should be able to handle high workloads as the company grows through horizontal scaling.

Performance:

- the system should be able to read the request formats quickly and send them to the required department to ensure solving problems quickly.
- the system should be able to read reports and calculate related information to give the employees the latest and most accurate data.
- the system shouldn't take a long to open (shorten the login time)
- transitioning between screens should be seamless (between the personal data screen and the reports screen for example)
- loading reports and requests should be quick.

System Rules:

- 1- a new account must only be added by an admin.
(FR-28)
- 2- the user must use the correct username and password to access the system. (FR-28)
- 3- the Minimum password length is eight. (FR-28)
- 4- the password must not contain three or more consecutive characters from the user's account name.
(FR-28)
- 5- the password must contain English uppercase characters (A — Z) (FR-28)
- 6- the password must contain English lowercase characters (a — z) (FR-28)
- 7- the password must contain Base 10 digits (0 — 9)
(FR-28)
- 8- the password must contain Non-alphanumeric (For example: \$, #, or %) (FR-28)
- 10-Requests must be uploaded in a specific format.
(FR-6)
- 11-Maintenance requests must be uploaded in a specific format. (FR-10)

12-Tool requests must be uploaded in a specific format.

(FR-2)

13-Hiring requests must be uploaded in a specific format.

(FR-9)

14-Lab requests must be uploaded in a specific format.

(FR-16)

15-Lab reports must be uploaded in a specific format.

(FR-17)

16-Financial requests must be uploaded in a specific format. (FR-5,6,24)

17-Production requests must be uploaded in a specific format. (FR-21)

18-Waste requests must be uploaded in a specific format.

(FR-15)

19-the system must not use reports that were uploads from a preset amount of time. (FR-13,14,15,21,21,25)

20-the system should not send tasks to the wrong employees. (FR-7,8,11,12)

System Services:

A) On-Site Security (FR-26,27):

- Monitoring the camera system
- Monitoring Work entry and departure times for employees

B) Login (FR-28):

- Shows the user the correct interface based on his profession and position.

C) Maintenance Management (FR-10,25):

- Monitoring the repairs of machines and tools
- Showing the locations of machine that are defective.
- Showing the defective machines and their defects

D) Transportation Management (FR-19):

- Managing the employee transport by managing the pickup times
- Managing the transport of products

E) Financial Management (FR-1,2,4,5,10,13,16,18,19,21,23,24,27):

- Managing the employee salaries and bonuses
- Showing the financial state of the company
- Displaying the required bills
- Showing the Value of the company stocks in the stock market
- Approving and declining the requests regarding purchasing
- Calculating the profit and losses of the company
- Displaying The salaries of all employees
- Comparing production with prediction

F) HR Management (FR-3,5,7,8,9,18,20,23,27):

- Managing employee promotions
- Managing hiring and firing employees
- Managing work teams
- Monitoring Work entry and departure times for employees
- Receiving employee report cards from HR workers

G) Laboratory Management (FR-16,17):

- Receive lab reports from lab members.
- Displaying lab reports

H) Insurance Management (FR-1):

- Managing the interaction between the financial department and insurance organization
- Managing the communication and editing the employee salaries

I) Waste recycling Management (FR-13,14,15):

- Managing wastes recycling
- Displaying the amount of waste produced
- Classification of produced waste

J) Legal affairs Management (FR-22,23):

- Displaying legal issues to the lawyers
- Applying legal actions

K) Requests Management System (FR-2,6,9,10,16):

- Managing Employee requests
- Managing hiring requests
- Managing lab requests
- Managing tool requests by Eng
- Managing maintenance requests

L) Scheduling System (FR-3,7,8,9,10,11,12,18,20,27):

- Managing shift distribution
- Managing shift duration
- Managing shift location
- Managing Task Distribution
- Display Employee schedule.
- Enables higher-ups to Edit task of lower ranked employees that are under them.

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	Subsystem Name	Subsystem Function	Subsystem Interface
A	On-Site Security Management System	<ul style="list-style-type: none"> - Monitoring the camera system - Monitoring Work entry and departure times for employees 	<ul style="list-style-type: none"> - public void view_camera(int camera_number) - public void count_enter(int employee_id) - public void count_exit(int employee_id)
B	Login System	<ul style="list-style-type: none"> - Shows the user the correct interface based on his profession and position 	<ul style="list-style-type: none"> - public boolean login(String username, String password) - public Account newAccount(String username, String password, String occupation, String position)
C	Maintenance Management System	<ul style="list-style-type: none"> - Monitoring the repairs of machines and tools - Showing the locations of machine that are defective - Showing the defective machines and their defects 	<ul style="list-style-type: none"> - public void monitor_repairs(Report report) - public String show_all_locations_of_defects() - public String show_location_of_defect(Report report) - public void show_all_defects() - public String show_defect(Report report)
D	Transportation Management System	<ul style="list-style-type: none"> - Managing the employee transport by managing the pickup times - Managing the transport of products 	<ul style="list-style-type: none"> - public void set_employee_pickup_time(Employee employee) - public void set_employee_pickup_location(Employee employee) - public void show_employee_transportation_info (Employee employee) - public int set_product_transportation_details(Report report) - public Report transportation_details(int transportation_id) - public void transport_start_confirmation(int transport_id, Boolean confirmation) - public void transport_end_confirmation(int transport_id, Boolean confirmation)
E	Financial Management System	<ul style="list-style-type: none"> - Managing the employee salaries and bonuses - Showing the financial state of the company - Displaying the required bills - Showing the Value of the company stocks in the stock market - Approving and declining the requests regarding purchasing - Calculating the profit and losses of the company - Displaying The salaries of all employees - Comparing production with prediction 	<ul style="list-style-type: none"> - public void set_employee_salary(int employee id, double new_salary) - public void set_employee_bonus(int employee_id, double bonus) - public int add_due_bill(Bill bill) - public void display_all_due_bills() - public void display_due_bill(int bill_id) - public void due_bill_action(int bill_id, boolean verdict) - public int add_total_expense(Bill final_receipt) - public void display_expense(int bill_id) - public void calculate_profit() - public void calculate_loss() - public void display_employee_salary(int employee_id) - public void display_all_employee_salaries()
F	HR Management System	<ul style="list-style-type: none"> - Managing employee promotions - Managing hiring and firing employees - Managing work teams - Monitoring Work entry and departure times for employees - receiving employee report cards from HR workers 	<ul style="list-style-type: none"> - public void set_employee_position(int id, String new_position) - public void fire_employee(int id, String reason_for_firing) - public int add_work_team(String team_name, String team_task, Department department) - public void add_employee_to_team(int team_id, int employee_id) - public void remove_employee_from_team(int team_id, int employee_id) - public void delete_team(int team_id) - public int add_employee_report_card(Report report, int employee_id) - public void delete_employee_report_card(int report_id, int employee_id)
G	Laboratory Management System	<ul style="list-style-type: none"> - Receive lab reports from lab members - Displaying lab reports 	<ul style="list-style-type: none"> - public int submit_lab_report(Report report) - public void display_lab_report(int report_id)
H	Insurance Management System	<ul style="list-style-type: none"> - Managing insurance by receiving the bills submitted by the employees and showing them to the accountants for review - Monitoring the wellbeing of the employees - Follow-up standards of peace and honesty 	<ul style="list-style-type: none"> - public int add_bill(int id, Report report) - public void view_bill(int bill_id) - public void bill_action(int billid, boolean verdict) - public int add_review(String review, int rating) - public void display_review(int review_id) - public void display_all_reviews() - public void delete_review(int review_id)
I	Waste recycling Management System	<ul style="list-style-type: none"> - Managing wastes recycling - Displaying the amount of waste produced - Classification of produced waste 	<ul style="list-style-type: none"> - public int submit_recycling_report(Report report) - public void display_recycling_report(int report_id) - public void write_report_to_the_system(int report_id) - public void calculate_waste_produced() - public void display_waste_classification()
J	Legal affairs Management System	<ul style="list-style-type: none"> - Displaying legal issues to the lawyers - Applying legal actions 	<ul style="list-style-type: none"> - public int submit_legal_paper(Report report) - public void display_legal_paper(int paper_id) - public void legal_action(int paper_id, boolean action)
K	Requests Management System	<ul style="list-style-type: none"> - Managing Employee requests - Managing hiring requests - Managing lab requests - Managing tool requests by Eng - Managing maintenance requests 	<ul style="list-style-type: none"> - public int add_employee_request(Request request) - public void display_employee_request(int employee_request_id) - public int add_lab_request(Request request) - public void display_lab_request(int lab_request_id) - public int add_Eng_tool_request(Request request) - public void display_Eng_tool_request(int Eng_tool_request_id) - public int add_maintenance_request(Request request) - public void display_maintenance_request(int maintenance_request_id)
L	Scheduling system	<ul style="list-style-type: none"> - Managing shift distribution - Managing shift duration - Managing shift location - Managing Task Distribution - Display Employee schedule - Enables higher-ups to Edit task of lower ranked employees that are under them 	<ul style="list-style-type: none"> - public int set_shift(int id, String shift_details) - public void set_shift_duration(int id, String start_time, String end_time) - public void set_shift_location(int id, String shift_location) - public int add_task(int id, String task_details) - public void edit_task(int id, int task_id, String new_details) - public void delete_task(int id, int task_id) - public void display_schedule(int id)

User Manual:

Login:

on entering the system, the user will be prompted to the login interface.

on entering the username and password and choosing the correct profession the user will be prompted an interface depending on his profession

Worker:

if the user logs in as a worker, he will be pushed to a screen containing his account information.

on the left side of the screen, there will be multiple options.

in the case of the worker (Account information(default), report, financial details, schedule, requests)

if the user clicks on any of the options he will be pushed to a different screen

in the case of the user choosing the reports option, the user will be pushed to a screen containing all the previous reports submitted by you or the other workers and a button on the bottom right corner giving you an option of uploading your Report

in case of choosing the financial details option, the user will be pushed into a screen containing all the details about his salary.

in case the user chooses the schedule, he will be pushed into a screen containing his shift time and location and requirements.

in case the user chooses the requests option he will be pushed to a screen containing the request history and 2 buttons (day off request (pushed by default) and maintenance request)

in case the user does not click either button he will be on the day-off request screen by default being prompted to enter the day and the reason for the request

but if the user decides to click on the maintenance request button he will be pushed to a screen where he will be prompted to enter the location of the malfunction and the reason for the malfunction if known

Lawyer:

if the user logs in as a lawyer, he will be pushed to a screen containing his account information.

on the left side of the screen, there will be multiple options

in the case of the lawyer (Account information(default), report, financial details, schedule, requests, contract review)

if the user clicks on any of the options he will be pushed to a different screen

in the case of the user choosing the reports option, the user will be pushed to a screen containing all the previous reports submitted by you or the other workers and a button on the bottom right corner giving you an option of uploading your Report

in case of choosing the financial details option, the user will be pushed into a screen containing all the details about his salary

in case the user chooses the schedule, he will be pushed into a screen containing his shift time and location and requirements

in case the user chooses the requests option he will be pushed into a screen containing the request history and a button(day off request) if pressed pushes the user into a screen prompting him to enter a date and reason for the request

in case of choosing the contract review option, the user will be pushed to a screen containing 2 buttons(old contracts(default) and new contracts) if the user chooses not to click any of the buttons

the old contract button will be pushed by default showing a list of the old contracts that have been approved or declined

in the case of the user clicking the new contract button, he will be pushed to a screen where the user will be a list of all the new contracts and an option of approving or disapproving them

HR:

if the user logs in as an HR worker, he will be pushed to a screen containing his account information.

on the left side of the screen, there will be multiple options.

in the case of HR workers (Account information(default), report, financial details, schedule, interview requests, requests)

if the user clicks on any of the options he will be pushed to a different screen

in the case of the user choosing the reports option, the user will be pushed to a screen containing all the previous reports submitted by you or the other workers and a button on the bottom right corner giving you an option of uploading your Report

in case of choosing the financial details option, the user will be pushed into a screen containing all the details about his salary.

in case the user chooses the schedule, he will be pushed into a screen containing his shift time and location and requirements

in case of the user chooses the interview requests option he will be pushed to a screen containing a list of names of the people requesting an interview with their CV links and a send an appointment email button and cancel request button

in case of the user chooses the request option, he will be pushed to a screen with a list containing the ids and corresponding requests and an accept request and cancel request button

Security:

if the user logs in as security he will be pushed to a screen containing his account information

on the left side of the screen, there will be multiple options

in the case of security workers (Account information(default), report, financial details, schedule, requests, camera view)

if the user clicks on any of the options he will be pushed to a different screen

in the case of the user choosing the reports option, the user will be pushed to a screen containing all the previous reports

submitted by you or the other workers and a button on the bottom right corner giving you an option of uploading your Report

in case of choosing the financial details option, the user will be pushed into a screen containing all the details about his salary

in case the user chooses the schedule he will be pushed into a screen containing his shift time and location and requirements

in case of the user chooses the request option, he will be pushed to a screen with a list containing the ids and corresponding requests and an accept request and cancel request button and a button where if the user chooses to press he will be prompted to enter a request

Lab Worker:

if the user logs in as a lab worker he will be pushed to a screen containing his account information

on the left side of the screen, there will be multiple options

in the case of the lab worker (Account information(default), report, financial details, schedule, requests, lab review)

if the user clicks on any of the options he will be pushed to a different screen

in the case of the user choosing the reports option, the user will be pushed to a screen containing all the previous reports submitted by you or the other workers and a button on the bottom right corner giving you an option of uploading your Report

in case of choosing the financial details option, the user will be pushed into a screen containing all the details about his salary

in case the user chooses the schedule he will be pushed into a screen containing his shift time and location and requirements

in case the user chooses the requests option he will be pushed to a screen containing the request history and 2 buttons (day off request(pushed by default) and maintenance request)

in case the user does not click either button he will be on the day-off request screen by default being prompted to enter the day and the reason for the request

but if the user decides to click on the maintenance request button he will be pushed to a screen where he will be prompted to enter the location of the malfunction and the reason for the malfunction if known

in case the user chooses the lab review option he will be pushed to a screen where the user will see 3 buttons (review lab progress(default), display lab workers, request lab requirements)

if the user chooses to not click any of the buttons the review lab progress button will be pushed by default displaying a lab progress report

if the user chooses to click the display lab workers button he would be pushed to a new screen where the lab members will be listed

if the user chose to click the request lab requirement button he will be prompted to enter the tool he would like to request and the reason for the request by uploading a report using the upload button with a send button on the bottom right to click after selecting the required tool

Accountant:

if the user logs in as an accountant he will be pushed to a screen containing his account information

on the left side of the screen, there will be multiple options

in the case of the accountant (Account information(default), report, financial details, schedule, requests, company Finance)

if the user clicks on any of the options he will be pushed to a different screen

in the case of the user choosing the reports option, the user will be pushed to a screen containing all the previous reports submitted by you or the other workers and a button on the bottom right corner giving you an option of uploading your Report

in case of choosing the financial details option, the user will be pushed into a screen containing all the details about his salary.

in case the user chooses the schedule, he will be pushed into a screen containing his shift time and location and requirements

in case the user chooses the requests option he will be pushed to a screen containing the request history and 2 buttons (day off request(pushed by default) and maintenance request)

in case the user does not click either button he will be on the day-off request screen by default being prompted to enter the day and the reason for the request

but if the user decides to click on the maintenance request button he will be pushed to a screen where he will be prompted to enter the location of the malfunction and the reason for the malfunction if known

in case the user chooses the company finance option he will be pushed to a screen containing a dropdown box containing (view bills, view taxes, view salary, financial report)

if the user clicks on the view bills option two buttons will appear (new bill, old bills) if the user chooses to click on the old bill button a list of the old bills will be displayed

and in the case of the new bill option, a list of the new bills will be displayed

in case the user chooses to click the view taxes option two buttons will appear (new taxes, old taxes) if the user chooses to click on the old taxes button a list of the old taxes will be displayed

and in the case of the new taxes option, a list of the new taxes will be displayed

in case the user chooses the view salary option he will be prompted to enter the id of the employee whom he wants to see the salary of

in case the user chooses the financial report option three buttons will appear (view old reports, view new reports, upload a new report)

if the user chooses the view old report option a list of old reports will be displayed

if the user chooses the view new report option a list of new reports will be displayed

if the user chooses the upload new report option, he will be prompted to enter a new report.

Engineer:

if the user logs in as a worker, he will be pushed to a screen containing his account information.

on the left side of the screen, there will be multiple options.

in the case of the worker (Account information(default), report, financial details, schedule, requests)

if the user clicks on any of the options he will be pushed to a different screen

in the case of the user choosing the reports option, the user will be pushed to a screen containing all the previous reports submitted by you or the other workers and a button on the bottom right corner giving you an option of uploading your Report

in case of choosing the financial details option, the user will be pushed into a screen containing all the details about his salary.

in case the user chooses the schedule, he will be pushed into a screen containing his shift time and location and requirements.

in case the user chooses the requests option he will be pushed to a screen containing the request history and 2 buttons (day off request (pushed by default) and maintenance request)

in case the user does not click either button he will be on the day-off request screen by default being prompted. to enter the day and the reason for the request

but if the user decides to click on the maintenance request button he will be pushed to a screen where he will be prompted to enter the location of the malfunction and the reason for the malfunction if known

in case the user chooses the View working site option he will be pushed to a screen containing a dropdown including(Display Progress, Display Employees working on the site)

if the user decides not to click either option, he will see the Display Progress option chosen by default

the user will see another drop down including the options (to-do, done, ongoing)

if the user decides not to click any of the options, he won't see anything

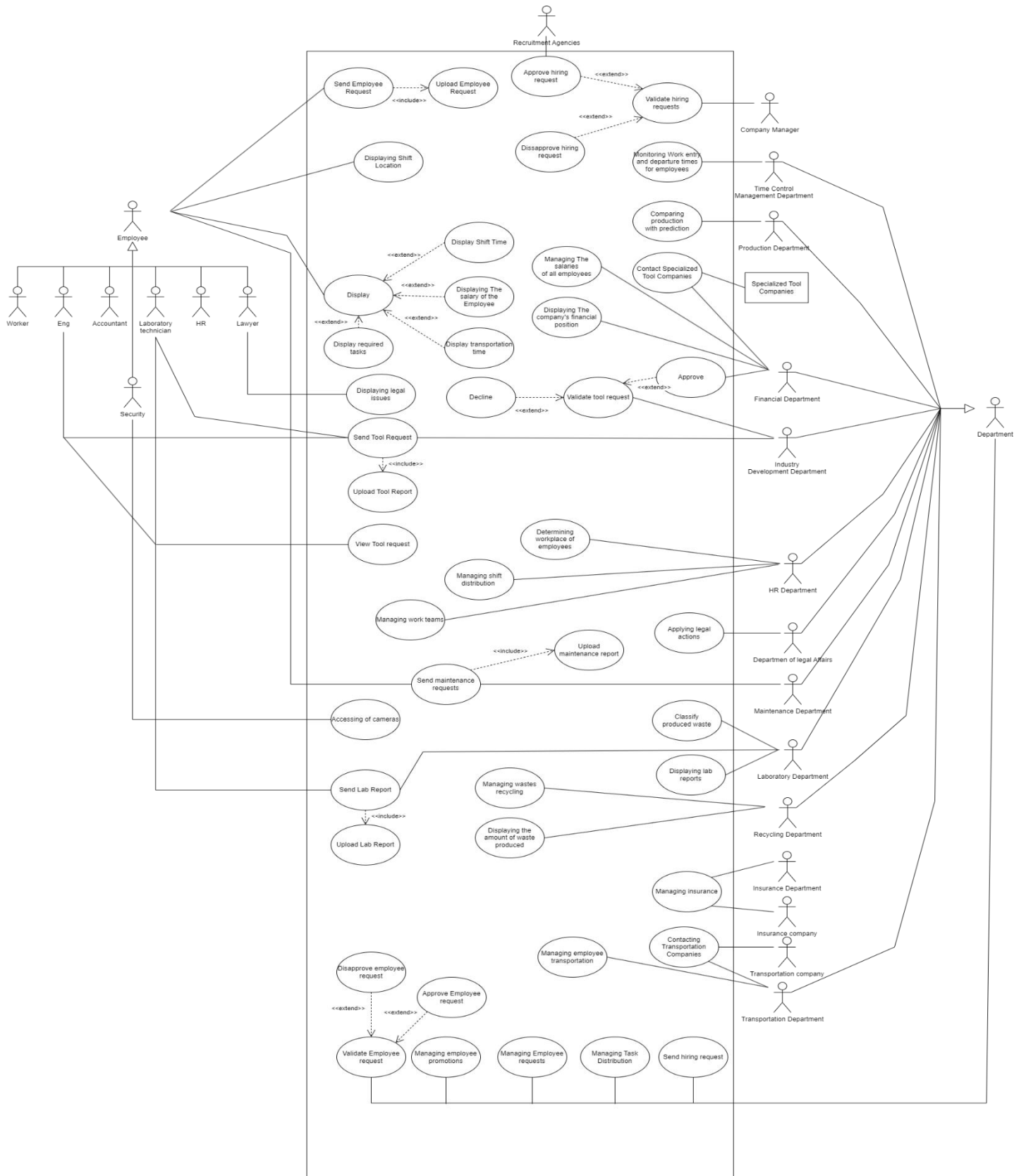
if the user chooses to click the to-do option he will be presented with all the tasks that he has to-do

if the user chooses to click the done option, he will be presented with all the tasks that he has completed

if the user chooses to click the ongoing option he will be presented with all the tasks that are in progress

if the user clicked the Display Employees Working On The Site option the user would see a list of all employees under him on the site

if the user clicks on any of the employees, he will be given the option to add a task to said employee



UseCase	Managing Tool Requests by Engineers
Goal in context	Managing Tool Requests by Engineers
Precondition	The engineer requires a tool that he doesn't have to do his work
Success condition	The engineer's tool request is approved by the Industry Development Department and the Financial Department
Fail condition	The engineering request is disapproved by the Industry Development Department and not sent for approval to the Financial Department
Primary actor	Engineer
Secondary actor	Industry Development Department, the Financial Department
Trigger	The engineer uploads a tool report and sends it to the Industry Development Department
Description	<ol style="list-style-type: none"> 1. The engineer uploads a tool report and sends it to the Industry Development Department 2. The request is sent to the Industry Development Department 3. The engineer receives a response to his request
Variation	<ol style="list-style-type: none"> 1.1. The engineer uploads a document 1.2. The engineer types a request using his keyboard 2.1. The request is approved by the Industry Development Department and sent to the Financial Department 2.2. The request is disapproved by the Industry Development Department
SubVariation	<ol style="list-style-type: none"> 1.1.1- The engineer uploads the report using the drag-and-drop option 1.1.2- the engineer uploads the report by selecting the desired report from his disk 2.1.1- The request is approved by the financial department 2.1.2- The request is disapproved by the financial department

Test requirements:

- ensure that Engineers have the send tool request option.
- ensure that there are to options to send a request.
- ensure that if the engineer clicks upload document he is asked to drag and drop a document or select it from his drive.
- ensure that if the engineer clicks the type of document he will be prompted to enter his request via keyboard
- ensure that the engineers' uploaded document is sent correctly to the Industry Development Department
- ensure that the typed request is sent correctly to Industry Development Department
- ensure that if the engineers request is approved by the Industry Development Department it is sent to the Financial Department
- ensure that if the engineers request is disapproved by the Industry Development Department it is not sent to the Financial Department
- ensure that if the Industry Development Department disapproves the Engineers request the Engineer receives a response that the request has been declined by the Industry Development Department
- ensure that if the Financial Department disapproves the Engineers request the Engineer receives a response that the request has been declined by the financial department

- ensure that if the financial department approves the Engineers request that he is sent a response informing him of the approval of both departments.
- Ensure that the Engineer can see the approval response.
- Ensure that the Engineer can see the disapproval response by the Industry Development Department
- Ensure that the Engineer can see the disapproval response by the Financial Development Department

Interaction Scenario:

<p>1.The engineer uploads a tool request</p> <p>3.The employee clicks the show request option</p>	<p>2.A notification appears ("Successfully Uploaded")</p> <p>4.The current state of the request is shown(usually pending (industry development department))</p>
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Alternative courses:

4.1.The request state is shown as pending (Financialdepartment)

4.2.The request state is shown as Approved

4.3.The request state is shown as Disapproved

UseCase	Manage Employee Request
Goal in context	This use case allows the Employee to send a Request
Precondition	The employee has a request to make
Success condition	The request has been approved by the selected department
Fail condition	Anything other than the success condition
Primary actor	Employee
Secondary actor	Department
Trigger	The employee uploads a report or writes it via keyboard
Description	<ol style="list-style-type: none"> 1. The employee click send request option 2. The employee clicks the upload request option 3. The request is sent to the selected department 4. The employee receives the response to his request
Variation	<ol style="list-style-type: none"> 2.1- The employee chooses to upload a document 2.2- The employee chooses to type (using the keyboard) the request 3.1- the request is sent to the HR department 3.2- the request is sent to the insurance department 3.3- the request is sent to the Industry Development Department 3.4- the request is sent to the recycling department 3.5- the request is sent to the laboratory department 3.6- the request is sent to the maintenance department 3.7- the request is sent to the department of legal affairs 3.8- the request is sent to the transportation department 3.9- the request is sent to the financial department 3.10- the request is sent to the production department 3.11- the request is sent to the Time Control Management Department 4.1- the employee receives an approval response for the selected department 4.2- the employee receives a declination response from the selected department
SubVariation	<ol style="list-style-type: none"> 2.1.1- The employee uploads the request using the drag-and-drop option 2.1.2- the employee uploads the request by selecting the desired request from his disk

Test requirements:

- check that send employee request option is available.
- check that the employee can upload a document.
- check that the employee has the uploaded document sent successfully.
- check that the employee has the option to type (using the keyboard) a document.
- check that the typed document is sent correctly.
- check that if the employee selects the HR department the document is sent to them correctly.
- check that if the employee selects the HR department the document is sent to them correctly.
- check that if the employee selects the insurance department the document is sent to them correctly.
- check that if the employee selects the Industry Development department the document is sent to them correctly.
- check that if the employee selects the recycling department the document is sent to them correctly.
- check that if the employee selects the laboratory department the document is sent to them correctly.
- check that if the employee selects the maintenance department the document is sent to them correctly.
- check that if the employee selects the department of legal affairs the document is sent to them correctly.

- check that if the employee selects the transportation department the document is sent to them correctly.
- check that if the employee selects the financial department the document is sent to them correctly.
- check that if the employee selects the production department the document is sent to them correctly.
- check that if the employee selects the Time Control Management department the document is sent to them correctly.
- check if the department approves the request that the response appears to all affected employees.
- check if the department disapproves the response so that only the employee that made the request can see it.

Interaction Scenario:

1- the employee clicks the request option	
2- the employee clicks the upload request option	
3- the employee selects the department (usually HR department)	4- the request is sent to the choosn department
5- the employee clicks display request state option	6- the state of the request is displayes(usually pending)

- 3.1- the employee selects the financial department
- 3.2- the employee selects the insurance department
- 3.3- the employee selects the industry development department
- 3.4- the employee selects the recycling department
- 3.5- the employee selects the laboratory department
- 3.6- the employee selects the maintenance department
- 3.7- the employee selects the department of legal affairs
- 3.8- the employee selects the transportation department
- 3.9- the employee selects the production department
- 3.10- the employee selects the time control management department
- 5.1- the state of the request is displayes as approved
- 5.2- the state of the request is displayes as declined

UseCase	Display
Goal in context	Seeing the data the employee desires
Precondition	The employee wanting to see his personal data
Success condition	The employee displays the chosen option successfully
Fail condition	Anything other than the success condition
Primary actor	Employee
Secondary actor	-----None-----
Trigger	The employee clicks the display data option
Description	<ol style="list-style-type: none"> 1. Click on the display button 2. Employee selects the type of displayed data
Variation	<ol style="list-style-type: none"> 2.1- the employee chooses to display shift time 2.2- the employee chooses to display transportation time 2.3- the employee chooses to display the salary of the employee 2.4- the employee chooses the display tasks option

Test requirements:

- check if the display button is available.
- check if the display shift time button is available.
- check if the display transportation time button is available.
- check if the display salary button is available.
- check if the display required tasks button is available.
- check that the display shift time displayed successfully.
- check if the shift time is edited the display shift time is displayed successfully.
- check that the display transportation displayed successfully.
- check if the transportation time is edited the display shift time is displayed successfully.
- check that the display salary displayed successfully.
- check if the salary is edited (increased due to promotion or decreased due to a fine)
- check that the display task option is displayed correctly.
- check that at editing the tasks for the employee it is updated correctly.

Interaction Scenario:

1- the user chooses the financial details option	2- the system retrives the users financial data and displayes it on the screen
3- the user chooses the schedual option	4- the system displayes the schedual(usually the work schedual)
5-the user chooses the diplay transportation schedual option	6- the system retrives the users transportaion details and displayes them on the screen

UseCase	Managing insurance
Goal in context	this feature is used by the Health insurance department to view and choose from the best options for improving the health insurance for the employees.
Precondition	Existing of Health insurance department and Employees in the company to apply for them in the Health insurance.
Success condition	Reaching an agreement between the Health insurance department and the Health insuring organization and applying for the employees in it.
Fail condition	Anything other than success end condition
Primary actor	Health insurance department.
Secondary actor	Health insurance organization and Employee.
Trigger	The Health Insurance Department submits an offer to the Health Insurance Organization.
Description	<ol style="list-style-type: none"> 1. The Health insurance department sends an e-mail to the Health insurance organization. 2. The Health insurance receives the e-mail from the Health insurance department. 3. The health insurance organizations consider the offer received from the Health insurance department. 4. The health insurance organizations send an e-mail with the response for the Health insurance department. 5. The Health insurance department receives the e-mail with the response from the organization. 6. The health insurance department gets in touch with the organization to sign the contracts.
Variation	<ol style="list-style-type: none"> 1.1-the Health insurance department sends an e-mail with an offer from the company to any Health insurance organization that can offer insurance for the companies. 4.1-the health insurance organization sends an e-mail with acceptance to the offer received from the Health insurance department. 4.2-the health insurance organization send an e-mail with rejection to the offer received from the Health insurance department. 5.1-the health insurance department receives an e-mail with acceptance to the offer. 5.2-the health insurance department receives an e-mail with rejection to the offer.

Test requirements:

- Every employee does not exceed the limited number of dependents
- Ensuring that the employee is still working for the company.
- Ensuring that the health insurance fees are taken off from the employees' salary
- Ensuring that if the number of dependents increased the health insurance fees have been increased
- Ensuring that if an employee uploaded an insurance request that it will be added to report list that will be reviewed
- Ensuring that if the request has been approved, the approvement is sent to the employee.

Interaction Scenario:

1- the health insurance department selects the insurance organization 2- the health insurance department uploads the email 4- the health insurance department clicks the view email option	3- the email is sent to the selected organization 5- the sent email is displays(usually without an attached response from the insurance organization(pending))
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5.1- the email is displayed with an approval response from the insurance organization

5.2- the email is displayed with a response rejecting the offer from the insurance organization

UseCase	Manage maintenance requests
Goal in context	Repairing machines that stopped working
Precondition	Machine(s) malfunctioned
Success condition	The machine works perfectly after and no complaints from the employees
Fail condition	Anything other than the success condition
Primary actor	Employee
Secondary actor	Maintenance department
Trigger	The employee complains about a malfunctioned machine and send a request
Description	<ul style="list-style-type: none"> 1- Employee clicks send maintenance request 2- The employee clicks the upload request option 3- The maintenance department receives the request 4- The maintenance department assigns task for a worker to go fix the malfunction 5- The maintenance department receives confirmation about the issue 6- The employee receives a notification informing that the maintenance is underway 7- The maintenance department edits the database putting the affected tool as malfunctioned 8- the maintenance department waits for the worker to confirm the repair of the malfunctioned tool 9- the maintenance department sends confirmation of the repair to the user 10- the maintenance department edits the database putting the tool back in operation
Variation	<ul style="list-style-type: none"> 2.1- The employee chooses to upload a document 2.2- The employee chooses to type the report via Keyboard 5.1- the worker finds no malfunction 5.2- the worker finds a malfunction

Test requirements:

- Check that send employee request option is available
- Check that employee can upload a document
- Check that the employee has the uploaded document sent successfully
- Check that the employee has the option to type a document (the malfunctioned machine)
- Check that the problem request was sent correctly
- Check that the malfunctioned machine is edited in the database as out of service
- Check that all related employees see the machine as malfunctioned
- Check that the maintenance department receives the workers confirmation correctly
- Check that the notification that the maintenance is underway is sent to the requester correctly
- Check that the maintenance department receives the workers repair confirmation correctly
- Check that after repair the machine is edited in the database as back in operation
- Check that the requestor and all related employees receive confirmation of the repair

<p>1- Employee uploads a maintenance request</p> <p>3- The employee clicks display maintenance request state</p>	<p>2- The system displays "successfully uploaded"</p> <p>4- The state of the request is displayed (usually pending)</p>
--	---

Alternative courses:

- 8.1- the system displays (Repair Underway)
- 8.2- the system displays (Repair Completed)
- 8.2- the system displays (No Issues)

Login interface 1

CompanyName

UserName

Enter UserName

Password

Enter Password

Position

▽

Login

CompanyName

UserName

Enter UserName

Password

Enter Password

Position

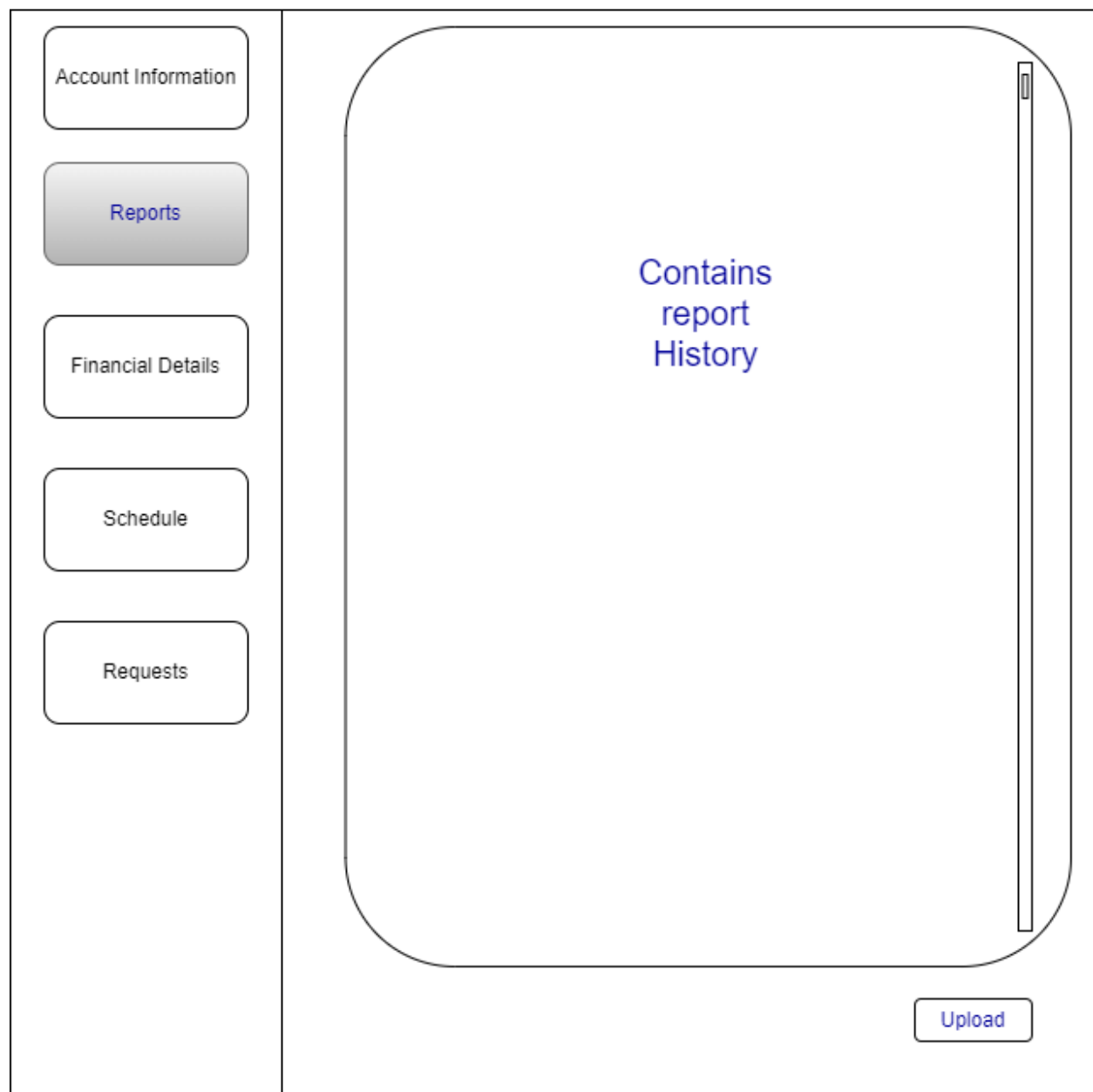
▼

Engineer
Worker
HR
Security
Lab Worker
Lawyer
Accountant

Login

Worker interface 1

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div>	<div><div>Photo</div><div>Name Age ID Phone Number Employee Position</div></div> <div>Email: Name@CompanyName.com</div>
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The mockup shows a web interface with a vertical sidebar on the left and a main content area on the right. The sidebar contains five buttons: 'Account Information', 'Reports' (highlighted with a grey gradient), 'Financial Details', 'Schedule', and 'Requests'. The main content area features a large rounded rectangle with the text 'Contains report History' in blue. A vertical scrollbar is on the right side of this rectangle. An 'Upload' button is located at the bottom right of the main content area.

Account Information

Reports

Financial Details

Schedule

Requests

Contains
report
History

Upload

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div>	<div>Work hours : NA</div> <div>Over time hours : NA</div> <div>Fines : NA</div> <div>Payment date : NA</div> <div>Incentives : NA</div> <div>Final payment : NA</div>
--	--

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div>	<div>Shift Start Time : NA Shift End Time : NA Shift Location : NA</div> <div>Shift Requirements</div>
--	--

Account Information	<div>Request History</div>
Reports	
Financial Details	
Schedule	
Requests	Day off Request
	Maintenance Request
	Requested date
	<input type="text"/>
	<div>Write reason</div>
	<div>Submit</div>

Account Information	<div>Request History</div>
Reports	
Financial Details	
Scedual	
Requets	Day off Request
	Maintenance Request
	Location
	Write reason
	Submit

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Scedual</div> <div>Interviews Requests</div>	<div><div>Photo</div><div><div>Name</div><div>Age</div><div>ID</div><div>Phone Number</div><div>Employee Position</div></div></div> <div>Email: Name@CompanyName.com</div>
--	--

<div data-bbox="228 327 462 443">Account Information</div> <div data-bbox="228 485 462 600">Reports</div> <div data-bbox="228 659 462 774">Financial Details</div> <div data-bbox="228 833 462 949">Scedual</div> <div data-bbox="228 1005 462 1121">Interviews Requests</div>	<div data-bbox="573 327 1403 1402"> <div data-bbox="896 577 1066 724">Contains report History</div> </div> <div data-bbox="1222 1436 1357 1484">Upload</div>
--	--

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Scedual</div> <div>Interviews Requests</div>	<div>Work hours : NA</div> <div>Over time hours : NA</div> <div>Fines : NA</div> <div>Payment date : NA</div> <div>Incentives : NA</div> <div>Final payment : NA</div>
--	--

Account Information	<div data-bbox="613 415 972 464">Shift Start Time : NA</div> <div data-bbox="613 485 959 533">Shift End Time : NA</div> <div data-bbox="613 554 941 602">Shift Location : NA</div> <div data-bbox="794 709 1135 762">Shift Requirements</div>
Reports	
Financial Details	
Scedual	
Interviews Requests	

Account Information	<div data-bbox="570 422 1300 464">1:name CV Link send appointment email cancel request</div> <div data-bbox="732 831 1208 884">contains interview requests</div>
Reports	
Financial Details	
Scedual	
interview requests	

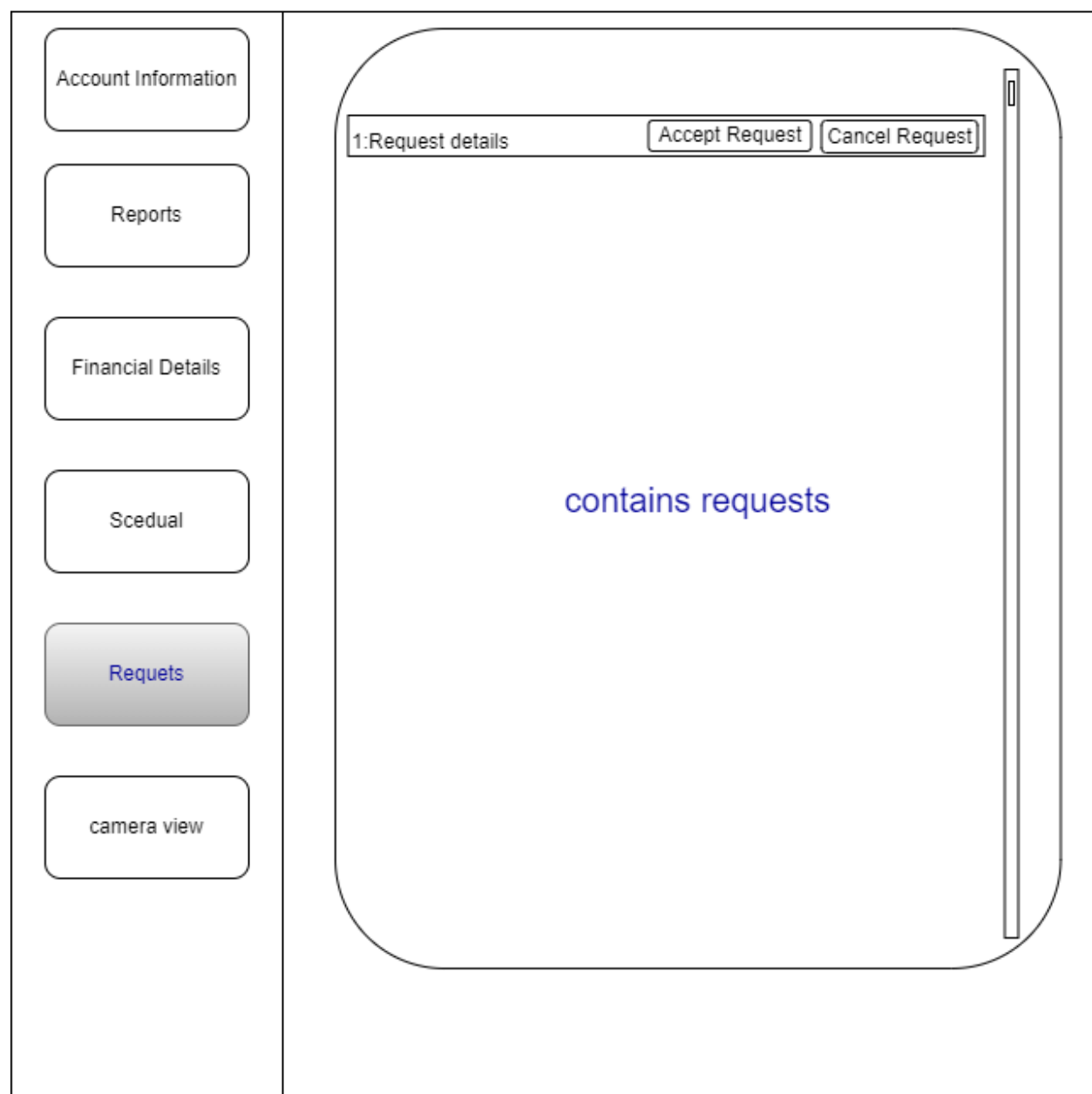
Account Information	<div data-bbox="570 405 656 447">1:name</div> <div data-bbox="915 405 1094 447">Accept Request</div> <div data-bbox="1110 405 1289 447">Cancel Request</div> <div data-bbox="818 825 1127 867">contains requests</div>
Reports	
Financial Details	
Scedual	
Interviews Requests	
requests	

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requets</div> <div>camera view</div>	<div><div>Photo</div><div><div>Name</div><div>Age</div><div>ID</div><div>Phone Number</div><div>Employee Position</div></div></div> <div>Email: Name@CompanyName.com</div>
--	--

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Scedual</div> <div>Requets</div> <div>camera view</div>	<div>Contains report History</div> <div>Upload</div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Scedual</div> <div>Requets</div> <div>camera view</div>	<div>Work hours : NA</div> <div>Over time hours : NA</div> <div>Fines : NA</div> <div>Payment date : NA</div> <div>Incentives : NA</div> <div>Final payment : NA</div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Scedual</div> <div>Requets</div> <div>camera view</div>	<div>Shift Start Time : NA</div> <div>Shift End Time : NA</div> <div>Shift Location : NA</div> <div>Shift Requirements</div>
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Account Information	Camera 1	Camera 2
Reports	VIEW	VIEW
Financial Details	Camera 3	Camera 4
schedule	VIEW	VIEW
Requests	Camera 5	Camera 6
camera view	VIEW	VIEW

Lawyer Interface 1

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>schedule</div> <div>Requests</div> <div>Contract Reveiw</div>	<div><div>Photo</div><div>Name Age ID Phone Number Employee Position</div></div> <div>Email: Name@CompanyName.com</div>
---	---

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>schedule</div> <div>Requests</div> <div>Contract Reveiw</div>	<div>Contains report History</div> <div>Upload</div>
---	--

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>schedule</div> <div>Requests</div> <div>Contract Reveiw</div>	<div>Work hours : NA</div> <div>Over time hours : NA</div> <div>Fines : NA</div> <div>Payment date : NA</div> <div>Incentives : NA</div> <div>Final payment : NA</div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>schedule</div> <div>Requests</div> <div>Contract Reveiw</div>	<div>Shift Start Time : NA</div> <div>Shift End Time : NA</div> <div><div>Shift Requirements</div></div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>schedule</div> <div>Requests</div> <div>Contract Reveiw</div>	<div>Request History</div> <div>Day off Request</div>
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Account Information	Old Contract Reveiw	New Contract Reveiw
Reports	<div data-bbox="643 674 1289 716">Search <input type="text"/></div> <div data-bbox="834 1016 1117 1066">Contract History</div>	
Financial Details		
schedule		
Requests		
Contract Reveiw		

Account Information	Old Contract Reveiw	New Contract Reveiw
Reports	<div data-bbox="597 615 927 730">Contract Pdf Url</div> <div data-bbox="954 615 1084 657">Approve</div> <div data-bbox="954 678 1084 720">Disapprove</div>	
Financial Details		
schedule		
Requests		
Contract Reveiw		

lab worker interface 1

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>Lab Review</div>	<div><div>Photo</div><div>Name Age ID Phone Number Employee Position</div></div> <div>Email: Name@CompanyName.com</div>
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Account Information

Reports

Financial Details

Schedule

Requests

Lab Review

Contains
report
History

Upload

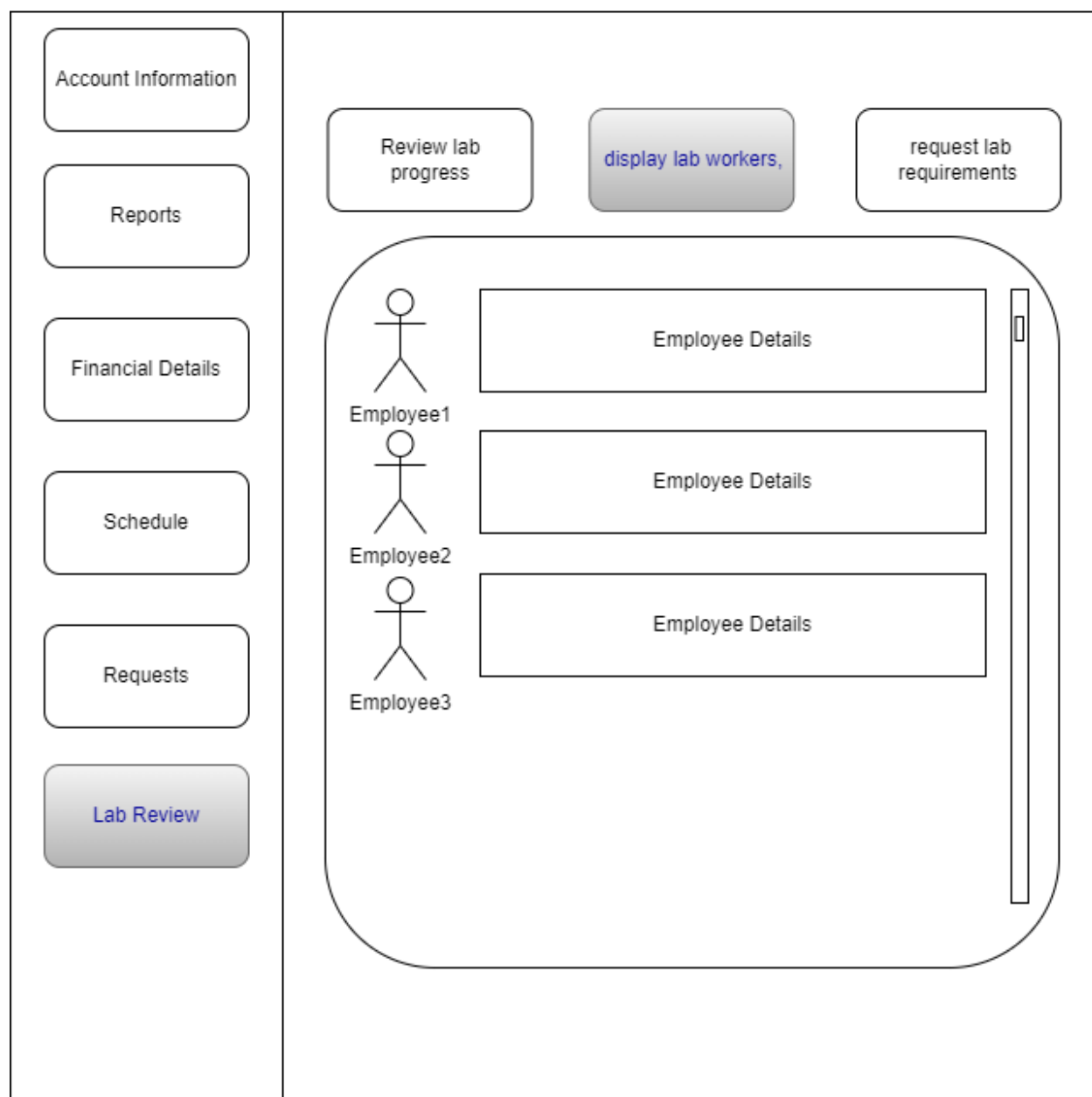
<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>Lab Review</div>	<div>Work hours : NA</div> <div>Over time hours : NA</div> <div>Fines : NA</div> <div>Payment date : NA</div> <div>Incentives : NA</div> <div>Final payment : NA</div>
--	--

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>Lab Review</div>	<div>Shift Start Time : NA Shift End Time : NA Shift Location : NA</div> <div>Shift Requirements</div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>Lab Review</div>	<div>Request History</div> <div>Day off Request</div> <div>Maintenance Request</div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>Lab Review</div>	<div>Request History</div> <div>Day off Request</div> <div>Maintenance Request</div>
--	--

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>Lab Review</div>	<div>Review lab progress</div> <div>display lab workers,</div> <div>request lab requirements</div>
	<div></div>



<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>Lab Review</div>	<div>Review lab progress</div> <div>display lab workers,</div> <div>request lab requirements</div>
	<div><div>Tool Name</div><div></div><div>File Name and details</div><div>Upload</div><div>Send</div></div>

Eng worker interface 1

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>View working site</div>	<div><div>Photo</div><div>Name Age ID Phone Number Employee Position</div></div> <div>Email: Name@CompanyName.com</div>
---	---

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>View working site</div>	<div>Contains report History</div> <div>Upload</div>
---	--

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>View working site</div>	<div>Work hours : NA</div> <div>Over time hours : NA</div> <div>Fines : NA</div> <div>Payment date : NA</div> <div>Incentives : NA</div> <div>Final payment : NA</div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>View working site</div>	<div>Shift Start Time : NA</div> <div>Shift End Time : NA</div> <div>Shift Location : NA</div> <div>Shift Requirements</div>
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<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>View working site</div>	<div>Request History</div> <div>Day off Request</div> <div>Maintenance Request</div>
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The interface is divided into two main sections. On the left is a vertical sidebar containing six buttons: 'Account Information', 'Reports', 'Financial Details', 'Schedule', 'Requests' (highlighted with a grey gradient), and 'View working site'. The main area on the right features a large rounded rectangle labeled 'Request History' in blue text, which includes a vertical scrollbar on its right side. Below this rectangle are two buttons: 'Day off Request' (with blue text) and 'Maintenance Request' (with a grey gradient).

Account Information

Reports

Financial Details

Schedule

Requests

View working site

Request History

Day off Request

Maintenance Request

Account Information	<div><div></div><div><div>-Display progress</div><div>-Display employees working on the site</div></div></div>
Reports	
Financial Details	
Schedule	
Requests	
View working site	<div><div></div><div><div>-Display to do task</div><div>-Display done task</div><div>-Display on doing task</div></div></div>

<div>Account Information</div> <div>Reports</div> <div>Financial Details</div> <div>Schedule</div> <div>Requests</div> <div>View working site</div>	<div><div></div></div> <div><div>-Display progress</div><div>-Display employees working on the site</div></div> <div></div>
---	---