BIRZEIT UNIVERSITY

Faculty of Engineering and Technology

Computer Science Department

COMP433 – Group Number: G6

Babysitter services

Chapter 1: Project Planning and Management

Names of Editors/writers of the Report: yousef, salah, Anas

	Students Role	Students Name	Students Number
1	secretary	Anas karakra	1200467
2	programmer	Feras Barghothi	1201921
3	Project manager	Yousef Sharbi	1202057
4	Technical architect	Mohammad Salem	1200651
5	QA	Salah abu Awada	1202699

Project management strategy: We had meeting on zoom at least two time per week, and we made all decision by voting.

Project manager report:

- **Challenges faced:** sometimes we had faced challenges of every group member had it's own thoughts and it different from the other, to solve this we set group member to re-drawing our thoughts.
- Evaluating project success depends on clarity.
- The contribution above each group task as below.

Group members report:

Anas: Evaluating project success depends customer feedback, The role of the leader includes facilitating group discussions, refining drafts, and incorporating feedback from various group members. In my opinion, this led to great success in this project.

Salah: Project success: If our goal is high user engagement, a significant increase in the number of active users will indicate achievement. Alternatively, if efficiency is key, faster processing times or fewer errors may measure success. Regardless, open communication and clear stages throughout the development process are crucial to tracking progress and making necessary adjustments. The role of the leader includes facilitating group discussions, refining drafts, and incorporating feedback from various group members. In my opinion, this led to great success in this project.

Feras: Evaluating project success depends on credibility, The role of the leader includes facilitating group discussions, refining drafts, and incorporating feedback from various group members. In my opinion, this led to great success in this project.

Mohammad: Evaluating project success depends on Reliability, The role of the leader includes facilitating group discussions, refining drafts, and incorporating feedback from various group members. In my opinion, this led to great success in this project.

What is our business?

Our business is a professional babysitting service that aims to provide parents with reliable and secure childcare solutions, the purpose of our services is to connect experienced babysitters with families that needs safe care for their children, creating a secure and dependable environment at home, ensuring parents can go about their responsibilities with peace of mind.

How our business work ?

Our business work through a shared platform that serves both parents and babysitters in easy process. The process involves:

- **Create account:** Parent and babysitter shall create account for them-selfs.
- **Parent choose Babysitter**: Parents should choose a babysitter based on:
  1. specific child care certifications
  2. experience
  3. available time slots
  4. location
  5. cost per hour
  6. Parent preferences
  7. other parent's reviews

- **Parent book Babysitter:** Parent shall book Babysitter and pay by credit card or cash.
- **Parent and Babysitter send report:** Parent and Babysitter shall send report to Manager to report issue.
- **Parent and Babysitter provide Feedback about system:** Parent and Babysitter shall provide feedback about system.
- **Parent rating and review babysitter:** Parent should provide rating and review for babysitter.
- **Manager maintains the system:** Manager shall review book proccess, payment proccess, reports and feedback which manager maintains the system as mentioned.

What are our business provides?

To ensure that our business introduce success and special babysitting services, we have implemented these features and non-functional Requirements:

- **Easy of learning and user friendliness:** Our system is created to be easy to use and it use little of clicking to make all steps to booking and can be good of use it on 10 mins of training.
- **Security:** Our system prompts any user will create an account on the system has a strong and secure password, also our system will delete all information of credit card details after the Parent made the transaction method.
- **Availability:** The Babysitter service system should have an uptime of at least 99% over any given month, allowing for scheduled maintenance windows of no more than 1% of the total time.

USER REQUIREMENTS and SYSTEM REQUIREMENTS:

Group Member
Lead: yousef sharbi; contributors: [Anas: Reviewing], [Firas: Re-drawing], [Salah: Discussing], [Mohammad: Finalizing]

- **UR1**: **The system shall allow Parent and Babysitter to create an account:**
  - **SR 1.1 Parents enter to website or mobile application and click on button create an account for parent then fill their information (e.g. Name, Email ,Location, Phone number, password).**
  - **SR 1.2 Babysitters enter to website or mobile application and click on button create an account for babysitter then fill their information(e.g. Name, Email, Location, Age, Phone number, Experience, Qualifications, Password, Cost per hour, availability time slots).**

- **UR2**: **the system shall allow parent to search for babysitter by fillter:**
  - **SR 2.1 parent should click on menu button or type on search bar then the system should allow the parent to search for specific child care certifications that babysitter had.**
  - **SR 2.2 parent should click on menu button or type on search bar then the system should allow the parent to search for experience that babysitter had.**
  - **SR 2.3 parent should click on menu button or type on search bar then the system should allow the parent to search for specific available time slots that babysitter had.**
  - **SR 2.4 parent should click on menu button or type on search bar then the system should allow the parent to search for location that babysitter had.**
  - **SR 2.5 parent should click on menu button or type on search bar then the system should allow the parent to search for cost per hour that babysitter had.**
  - **SR 2.6 parent should click on menu button or type on search bar then the system should allow the parent to search for parent preferences that babysitter had.**
  - **SR 2.7 parent should click on menu button or type on search bar then the system should allow the parent to search for other parent's reviews that babysitter had.**

- **UR3**: **The system shall allow Parent to Book Babysitter after choosing babysitter:**
  - **SR 3.1 : Parent should select the exact date and time.**
  - **SR 3.2 : parent should enter the children information(number of children , ages and main specificatons).**
  - **SR 3.3 : After parent click on book button the details reach to manager.**
  - **SR 3.4 : Manager shall send the request to babysitter containing informaton provided by the parent.**
  - **SR 3.5 : Babysitter should accept or reject the request that sent from manager.**

- **UR4**: **The system shall allows parents to pay via credit card and manual payments and the money goes into the babysitter's account:.**

    - **SR 4.1 : The system shall allows parents to pay by credit card after they enter the detail of credit card (first name , last name , credit card number and cvv) The system checks the validity of the card and the money goes into the babaysitter's account and system update the payment acount parent.**
    - **SR 4.2 : The system shall allows parents to pay cash after the babaysitter enter the detail of parent (parent payment account , number of children ,amont of money , date) and The system checks if the parent payment acount alread exist and the system update the payment account parent.**
    - **SR 4.3 : The system shall display detailed information for each transaction(the parent and the babysitter), including the date and time of service,job details (child information, duration, location),payment amount,service Fee Details (system Earnings),payment method used (credit card, cash) and transaction status (pending, completed, refunded).**
    - **SR 4.4 : The system should allow babysitter and parent to download and print transaction details as individual receipts or bulk statements for a specified period of time (week).**

- **UR5**: **The system shall allow Parent to Rating and Review the babysitter:**
    - **SR 5.1 Parents should give five stars or less as a rate for babysitters .**
    - **SR 5.2 Parents should write comments as a review for babysitters .**
    - **SR 5.3 Implement a notification system to alert parents when their babysitter has been rated or reviewed.**
    - **SR 5.4 Babysitters should also receive notifications when they receive new ratings or reviews, encouraging transparency and communication.**

- **UR6**: **: The system shall allow Parent and babysitter to view their time slot:**
    - **SR 6.1: parent should click on time slot button to see the time that parent booked the babysitter.**
    - **SR 6.2: babysitter should click on time slot button to see the time that babysitter booked on it.**
    - **SR 6.3: The (weekly) calendar interface should display times (days) and details (hours), highlighting booked jobs.**
    - **SR 6.4: The system should use visual indicators (e.g., color-coded blocks) to represent the availability status of babysitters in the calendar.**
    - **SR 6.5: The calendar should support real-time updates, ensuring that any changes babysitters make to their availability are immediately reflected on both parent and babysitter calendar's**

- **UR7**: **The system shall allow Parent and babysitter to report issue:**

    - **SR 7.1: parent should click on report button to write the problem issue or provide snapshot to Manager.**
    - **SR 7.2: babysitter should click on report button to write the problem issue or provide snapshot to Manager.**
    - **SR7.3: the Manager response the issue and solve it and return the solution.**

Scenario Analysis:

Yousef Sharbi

- **Registration An Account:**

  - **Initial assumption:**
    Parent and babysitters shall easily register on the platform with their information.

  - **Normal (~successful outcome):**
    Parent Em-Rami decides to register an account on the babysitting service platform. She visits the platform's website, then she clicks on the "Sign Up account for parent" to create account, and fills in the required information, including her name, email, location, gender, number of children, phone number and password. The system prompts her to create a secure password for her account. Em-Rami successfully completes the registration process and receives a confirmation email. She can now log in to the platform.

  - **Alternative (~successful outcome):**
    Babysitter Lana wants to join the babysitting service platform to offer her services to parents. She downloads the Babysitter mobile app for IOS, then she clicks on the " Sign Up account for babysitter" to create account, and fills in the required information, including her name, email, location, age, phone number, experience, qualifications, password, cost and availability time slots. The system prompts her to create a strong password for her account. Lana successfully completes the registration process and receives a confirmation email. Her account is now live, and she can start receiving booking requests from parents interested in her babysitting services.

  - **Error (~unsuccessful outcome):**
    Em-Rami attempts to register on the babysitting service platform, but she encounters issue during the registration process. The system fails to authenticate her chosen password, indicating that it does not meet the security requirements. Em-Rami receives an error message prompting her to choose a stronger password with a combination of letters, numbers, and special characters. Em-Rami struggles to create an acceptable password, resulting in multiple failed attempts. Then she contacts with Manager to report the issue.

  - **Error (~unsuccessful outcome):**
    Babysitter Lana completes the registration form on the platform but she inserts incorrect information (.e.g age, email). She realizes the incorrect information and attempts to update the information, expecting the system to allow her to update her details. However, the system fail to prevent Lana from updating her information. Then she contacts with Manager to report the issue.

  - **Other Activities:**
    After successful registration, both Parent and Babysitter are directed to a login page and after the system validate their information then they will directed to home page which they can interact with the system.

Mohammad Salem

- **Choose Babysitters:**
  - **Initial assumption:**

    Parent shall perform advanced searches by find babysitters flexibly, based on specific criteria such as certifications, experience, time slot, location, preferences and cost.

  - **Normal (~successful outcome):**

    After log in operation is completely success done, Parent Salem decides to choose babysitters from '***Search Based On*** **menu button'**, that appears on the platform. He chooses a specific search option by clicking on the one of the following suggestions buttons:

    - Babysitter based on specific child care certifications:
      1. CPR
      2. First aid
      3. Early childhood education
    - Babysitters with experience in specific areas:
      1. Child care
      2. Special needs
      3. Language proficiency
      4. Teaching skills
    - Desired date, time and duration of the babysitting job.
    - Location, nearest babysitter.
    - Parent preferences:
      1. Years of experience.
      2. Range age preferred.
      3. Number of children typically cared for.
    - Babysitters hourly rate (cost per hour).
    - Based on other parent's reviews by display rating of the babysitters.

  - **Alternative (~successful outcome):**

    Parent Layan wants to search on babysitting by using search engine bar.

    Initially, when Layan point her mouse over the search bar, The system will show her previous search results, as a suggestion for Layan. If Layan does not choose one of the suggestions, she will click on the search bar and request multiple of queries based on information that exist on a data base.

  - **Error (~unsuccessful outcome):**

    Parent Layan attempts to search on the babysitting website, but she encounters an error during the search process. The system fails to retrieval of item from database, indicating that it does not find the queries requirements, due to these *keywords or queries* does not exist on a data base, or may occurs technical error. Then she contacts with Manager to report the issue.

  - **Error (~unsuccessful outcome):**

    Parent Salem completes the process on the babysitter website by clicking on the one of search options button, but the system returns incorrect list of babysitters, Also the system returns the error message.

  - **Other Activities**:

    After successful search operation, then the system returns the success search result based on parent choice.

Salah Abuawada

- **Booking Process:**

  - **Initial assumption:**
    Parent has easy process to book a babysitter.

  - **Normal (~successful outcome):**

    Em-Iyad, a parent looking for babysitting services, begins the booking process by logging into the system and going to the ”Search babysitter” then “Book a Babysitter” section. When browsing available nannies based on the result of the parent’s search with detailed profiles, Em-Iyad selects her favorite babysitter, and confirms the reservation by pressing the Confirm Booking button, which causes the system to create a request and send it to the babysitter. specified. Then, upon receiving the request, the babysitter reviews the matter and accepts the job through the system. The system immediately updates the reservation status to “Awaiting Confirmation,” notifying both parties. Em-Iyad goes to the payment section and securely provides the necessary details to process the transaction. After successful payment, the system updates the reservation status to “Confirmed,” and sends email confirmations to both Umm Iyad and the babysitter. After the transaction, the system securely stores the transaction details.

  - **Error (~unsuccessful outcome):**

    Em-Iyad wants to book a babysitter. Em-Iyad chooses a babysitter that suits her needs, confirms the reservation, and the system sends the request to the babysitter. However, the chosen babysitter rejects the job offer. The system then sends an email to the parent that the babysitter he wants to book has rejected the request and will also suggest an alternative babysitter with the same competence and availability at the required time. Em-Iyad either books a babysitter or cancels the operation.

Other Activities:

When a parent initiates the process of booking a babysitter, the system temporarily locks the babysitter's calendar for the required duration. This prevents other parents from trying to book the same babysitter for overlapping time periods simultaneously. A temporary calendar lock ensures that the selected babysitter remains available for the booking session, allowing the parent time to complete the transaction.

Anas Karakra

- **Payment Proccess:**

  - **Initial assumption:**
    Parents and babysitters have a secure transactions facilitated by the bank for the babysitting services provided, or by pay cash.

  - **Normal (~successful outcome):**
    Parent Em-Sameer, after booking the babysitter, proceeds to the payment section. The system securely prompts Em-Sameer to enter credit card details for payment. Em-Sameer inputs the correct credit card information, including card number, expiration date, and CVV code. The system validates the information and processes the payment successfully. Em-Sameer receives an instant payment confirmation, and the transaction status is marked as completed.

  - **Alternative (~successful outcome):**
    Parent Em-Sammer chooses to send payment in cash. The system allows this option, Upon the babysitter's departure, Em-Sammer hands over the agreed-upon cash payment to Babysitter. The system updates the transaction status, marking it as completed.

  - **Error (~unsuccessful outcome):**
    Parent Em-Sameer, attempting to make a credit card payment, faces an issue as the system verifies the lack of sufficient funds in the linked bank account. The system displays an error message indicating insufficient funds.

  - **Error (~unsuccessful outcome):**
    Parent Em-Rami, after choosing to send payment in cash, encounters a discrepancy in the agreed-upon amount. The system, however, marks the transaction as completed. Realizing the error, Em-Rami contacts the babysitter to address the issue.

  - **Other Activities:**
    After completing a successful payment transaction, both the parent and babysitter receive automated email receipts containing detailed information about the transaction. The receipt includes a summary of the babysitting job, the total payment amount, the service fee breakdown, and the payment method used. This email receipt serves as a record for both parties and facilitates transparency in financial transactions.

Feras Albargouthy

- **Rating And Review Babysitter:**

  - **Initial assumption:**
    Parents can rate and review the babysitter on platform.

    - **Normal (~successful outcome):**
      Parent Em-Islam, after receiving excellent babysitting services from Babysitter Lana for her two children, decides to make positive rating to Lana on the platform. Em-Islam logs into the system, search and choose Lana profile, and rates Lana with five stars.

    - **Alternative (~successful outcome):**
      Parent Em-Islam, after receiving excellent babysitting services from Babysitter Lana for her two children, decide to share her positive experience on the platform. Em-Islam logs into the system, search and choose Lana profile, and written positive review accompanied by a brief comment expressing her satisfaction. The system promptly updates Lana profile with the new review, and other parents browsing the platform can now see and consider feedback when choosing a babysitter.

  - **Error (~unsuccessful outcome):**
    Parent Em-Islam attempts to rate and review Babysitter Lana, but the system fail submitting the feedback. The system displays an error message, indicating a technical issue with the review submission process. Em-Islam is unable to post the review. Concerned about the system glitch, Em-Islam contacts with Manager to report the issue.

  - **Error (~unsuccessful outcome):**
    Parent Em-Islam attempts to rate and review Babysitter Lana and successfully submits the feedback. However, the system fails to accepts the review submission multiple times, creating duplicate entries on Lana's profile.

  - **Other Activates:**
    When rating and review complete, The system updates Babysitter profile with the new rating and review.

EFFORT and TIME ESTIMATION:

Group Member
Lead: Anas ; contributors: [Salah: Reviewing], [Mohammad: Re-drawing], [yousef: Discussing], [feras: Finalizing]

UR	Estestimated effort (avarage/developer)	Estestimated NO of Developers	Total effort (for one developer)
UR1	1pw	1	= 1 * 1 = 1pw
UR2	3 pw	2	= 3*2= 6pw
UR3	2pw	2	= 2 * 2 = 4pw
UR4	2.5pw	2	= 2.5 * 2 = 5pw
UR5	1pw	1	= 1*1 = 1pw
UR6	1.5 pw	1	= 1.5*1 = 1.5pw
UR7	0.5pw	1	= 0.5*1 = 0.5pw
Total effort /avg	11.5pw	(10)/ 8 = 1.25 dev on avg needed	19 pw
Schedule time 30%	11.3 * 1.3 = 14.95 w (min time to complete all system)		19 * 1.3 = 24.7 w (max time to complete all system)
Cost		Avg salary/w = 325$	325$ * 24.7 w = 8027$
Profit margin (min 10%; max=30%)		Min cost ➔ Max cost ➔	8027$ * 1.10 = 8830$ 8027$ * 1.30 = 10435$

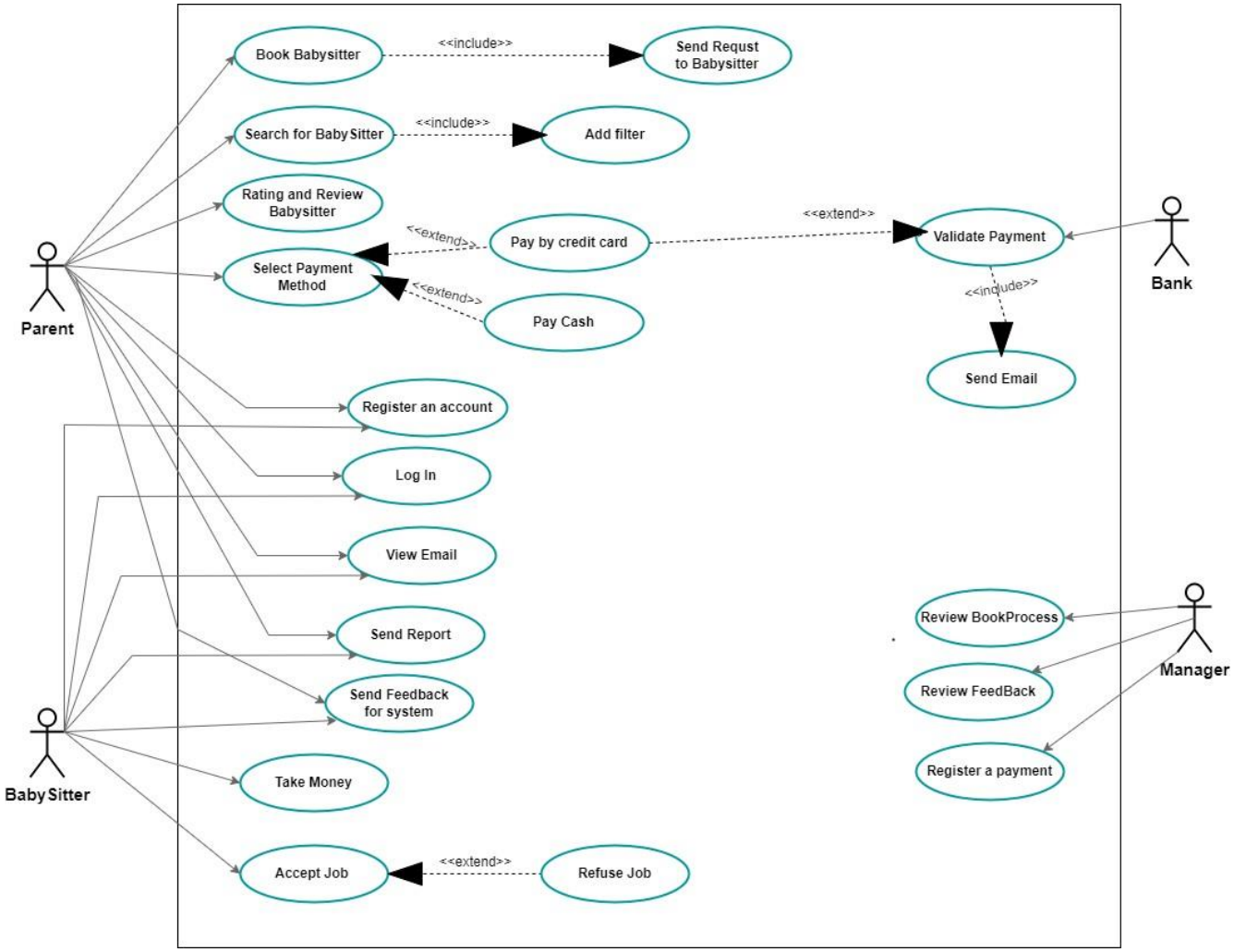
Actor Analysis:

Group Member
Lead: yousef sharbi; contributors: [Anas: Reviewing], [Mohammad: Re-drawing], [Salah: Discussing], [Firas: Finalizing]

Actor	Semantics/Description
Parent	**This actor represents someone using the babysitting service platform to find and book babysitters for their children.**
Babysitter	**This actor represents someone offering babysitting services on the platform, available for parents to book.**
Bank	**This actor represents the financial entity responsible for handling secure transactions and processing payments on the platform.**
Manager	**This actor represents an individual managing the overall functioning and performance of the babysitting service platform.**

Use-Case Modelling:

Group Member
Lead: yousef sharbi; contributors: [Feras: Reviewing], [Mohammad: Re-drawing], [Salah: Discussing], [Anas: Finalizing]



Use-Case Specification:

Mohammad Salem

- **Search for babysitter**

Babysitter System: Choose Babysitters (Search Babysitter)	
Actor	Parent
Description	The parent can look for a suitable babysitter based on the results of his search, whether from the menu or from search bar.
Pre-conditions	1- Parent has an account in babysitter system and has been logged in to this system as a parent. 2- Search Engine Availability and Query Validity on search bar: The search query provided by parent must be valid and conform to the syntax and semantics accepted by the search system.
Sequence/Flow of Events	1. The parent chooses the research method (process) that he decides it is appropriate for him. 2. If his choice is among the menu buttons, then the search is performed as programmed for each button (based on specific criteria). 3. As an alternative if the parent decides to use the search bar engine instead of the buttons under the menu, he will either choose based on the parent's previous choices or based on a custom query whereby the new search attempt will be recorded in the system. 4. the system returns the results according the given search to the parent. If the query doesn't work, the system sends a message to Manager.
Data	The new search attempt will be recorded in the system.
Stimulus/Trigger	User command issued by the parent to choose a babysitter.
Post-conditions/Response	1- The system will send a message to the parent due to the failed search attempt. 2- The system will update the success attempt on search bar.

Salah abuawada

- **Book babysitter**

Actors	Parent, Babysitter ,Manager
Description	The parent can book a babysitter based on the results of his search.
Pre-conditions	1- The parent has an account in this system and has been logged in to this system as a parent. 2- The parent has searched for a babysitter that suits him. 3- The results of the search conducted by the parent appear.
Sequence/Flow of Events	1. The parent chooses the exact time and date for the session. 2. The parent has a designated place in this activity to put the information necessary for the booking process. This information is specific to the children, their number, ages, and main specifications. 3. The manager will send a request to babysitter containing information provided by the parent. 4. If the babysitter does not accept the job: • the manager will send an email to the parent stating that the job has not been accepted, and It will suggest another babysitter that fits his search. 5. If the babysitter accepts the job: • the manager will send an email to the parent stating that the job has been accepted.
Data	Date and time, Parent information that's filled from parent's profile, Children's information entered by the parent, payment information.
Stimulus/Trigger	User command issued by the parent to book a babysitter.
Post-conditions/Response	1- The Bank send an email to the babysitter that the payment was completed successfully. 2- The manager maintain the babysitter's calendar based on the booking made.
Comments	The specified data elements (date and time, parent information, children' information, payment information) are essential for the booking process and post-confirmation procedures.

Anas karakra

- **Payment proccess**

Actors	Parent, Babysitter, Bank
Description	This use case outlines the process of handling payment transactions for babysitting services, considering various scenarios such as credit card payments or cash transactions.
Pre-conditions	1- A babysitting service has been booked. 2- Payment method include credit card or cash.
Sequence/Flow of Events	1- The parent initiates the payment process after booking the babysitter. 2- If the payment method is credit card: a. The system securely prompts the parent to enter credit card details. b. The parent inputs correct credit card information (card number, expiration date, CVV code). c. The system validates the information. d. If successful, the payment is processed, and the transaction status is marked as completed. 3- If the payment method is cash: a. The parent chooses to send payment in cash. b. Upon the babysitter's departure, the parent hands over the agreed-upon cash payment. c. The system updates the transaction status, marking it as completed.
Data	Parent and babysitter details, Credit card information, Cash payment details
Stimulus/Trigger	User command initiated by the parent.
Post-conditions/Response	1- For credit card payment: - The system processes the payment successfully. - The parents receive an email payment confirmation. - The transaction status is marked as completed. 2- For cash payment: - The system updates the transaction status, The parent receives an email payment confirmation, marking it as completed.
Comments	- In case of credit card payment errors (insufficient funds), the system displays an appropriate error message. - In case of cash payment errors (discrepancy in the amount), the system marks the transaction as completed, and it is the responsibility of the involved parties to address the issue. - Automated email receipts are sent to both the parent and babysitter after a successful transaction, providing detailed information for record-keeping and transparency.

Feras Albarghouthy

- **Send Report**

Actors	Parent , Babysitter
Description	Users have the capability to send reports to the Manager to address technical issues, concerns, or provide feedback related to the platform.
Pre-conditions	1-Parent must be a registered member of the platform. 2-Babysitter must be a registered member of the platform.
Sequence/Flow of Events	1- User logs into the system. 2- User navigates to the "Help" section. 3- User selects the option to Send Report. 4- User describes the issue, including relevant details, and may attach screenshots or files. 5- User submits the report through the platform.
Data	1- User's detailed description of the issue or feedback. 2- Screenshots or attachments.
Stimulus/Trigger	User command issued by the sender through the platform.
Post-conditions/Response	1- The system records the user's report. 2- The Manager receives and acknowledges the report. 3- Manager initiates the process of addressing the reported issue.
Comments	users provide clear and detailed information in their reports, such as Screenshots or attachments can assist in understanding the reported issue.

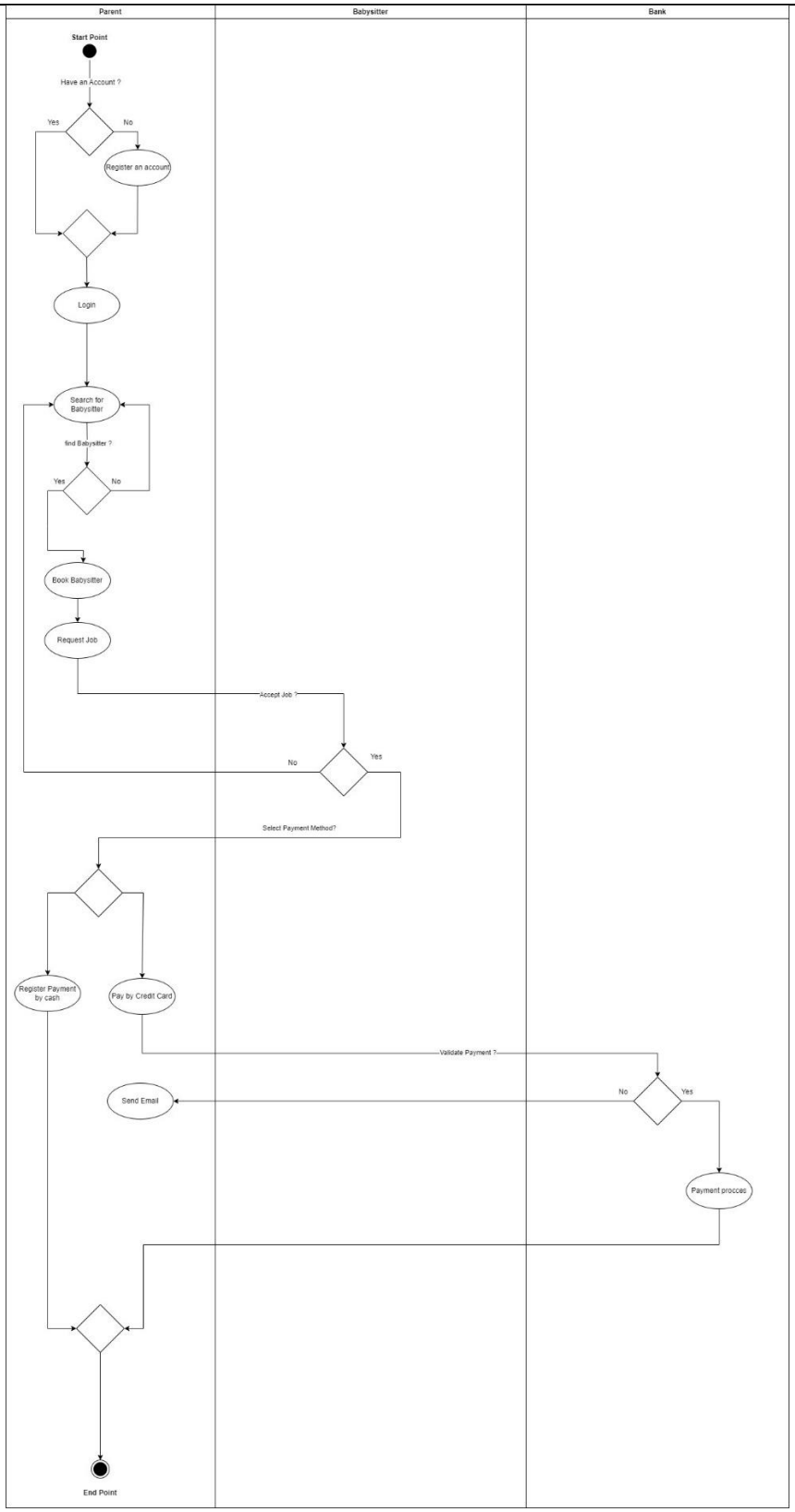
Yousef Sharbi

- **Rating and Review Babysitter**

Actors	Parent, Babysitter
Description	Parents have the ability to rate and review babysitters on the platform.
Pre-conditions	1- Parent is a registered member of the babysitting platform. 2- Babysitter has completed at least one babysitting job on the platform.
Sequence/Flow of Events	1- Parent logs into the system. 2- Parent navigates to Babysitter profile. 3- Parent selects the option to provide a rating and review. 4- The system prompts Parent to rate Babysitter on a scale of 1 to 5 stars. 5- Parent provides a rating of 5 stars for the excellent babysitting service received from Babysitter. 6- The system then prompts Parent to leave a written review. 7- Parent writes a positive review, expressing satisfaction with Babysitter services. 8- Parent submits the rating and review through the platform.
Data	Rating, Written Review
Stimulus/Trigger	User command issued by Parent through the platform.
Post-conditions/Response	1- The system updates Babysitter profile with the new 5-star rating. 2- The written review is added to Babysitter profile for other parents to view. 3- Babysitter overall rating on the platform is recalculated based on Parent contribution.
Comments	The platform may implement measures to prevent fraudulent reviews, such as restricting multiple submissions or periodic reviews.

Activity Modelling:

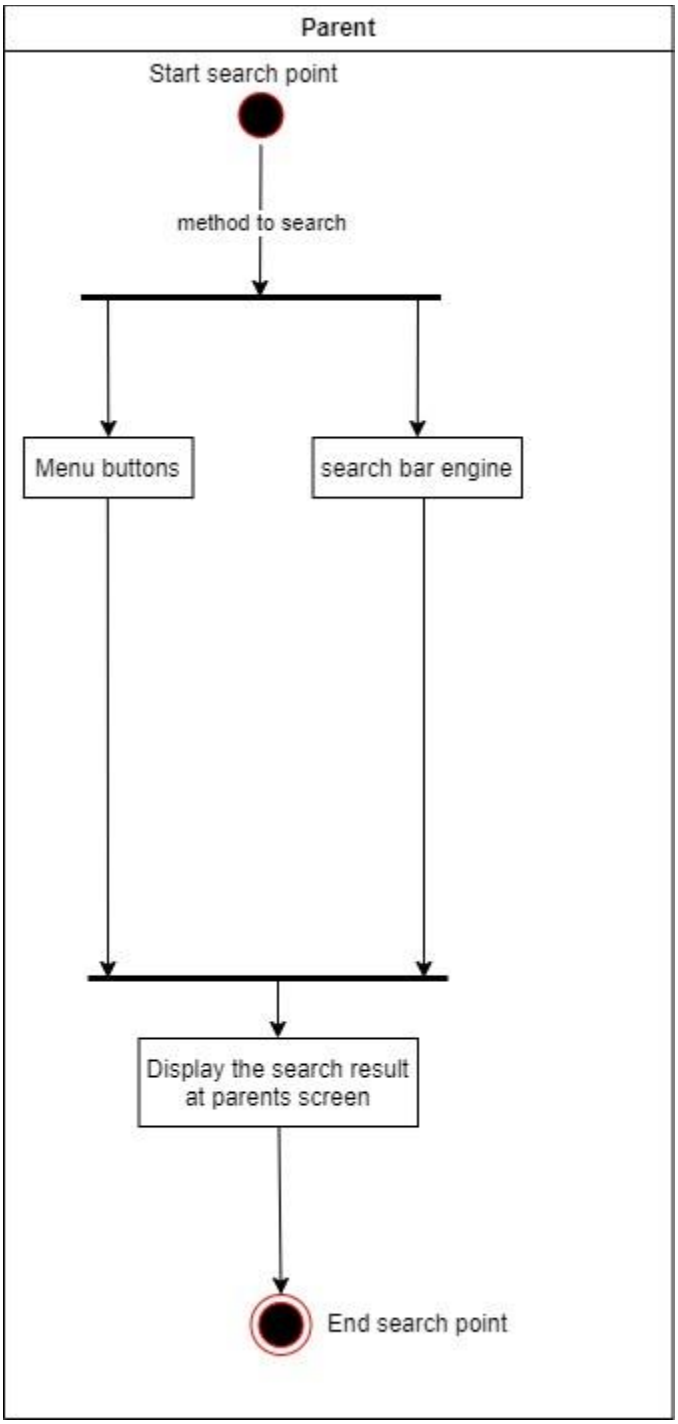
Group Member
Lead: Salah; contributors: [Yousef: Reviewing], [Anas: Re-drawing], [Feras: Discussing], [Mohammad: Finalizing]



Use-Case Activity Modelling:

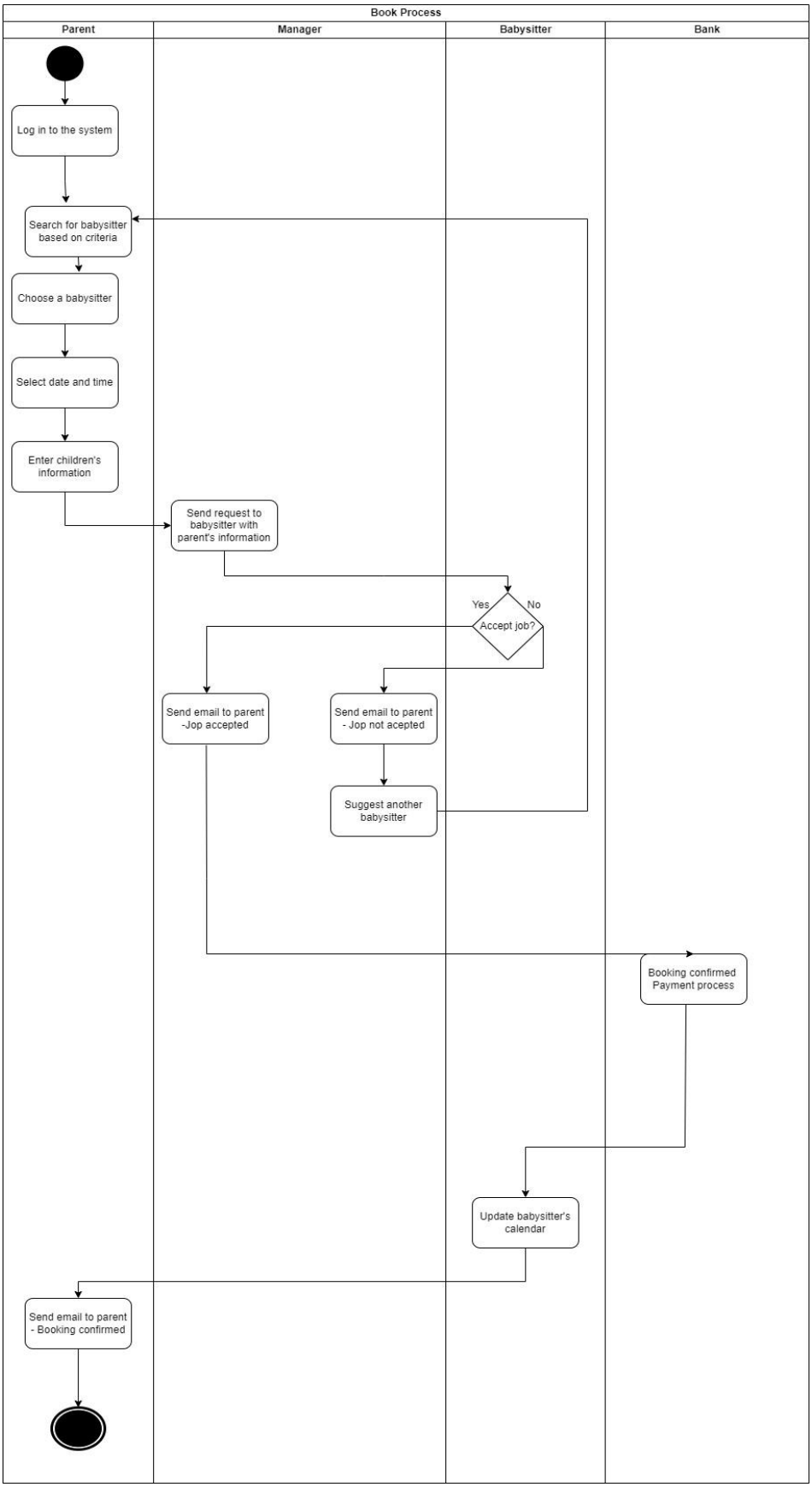
Mohammad Salem

- **Search for Babysitter:**



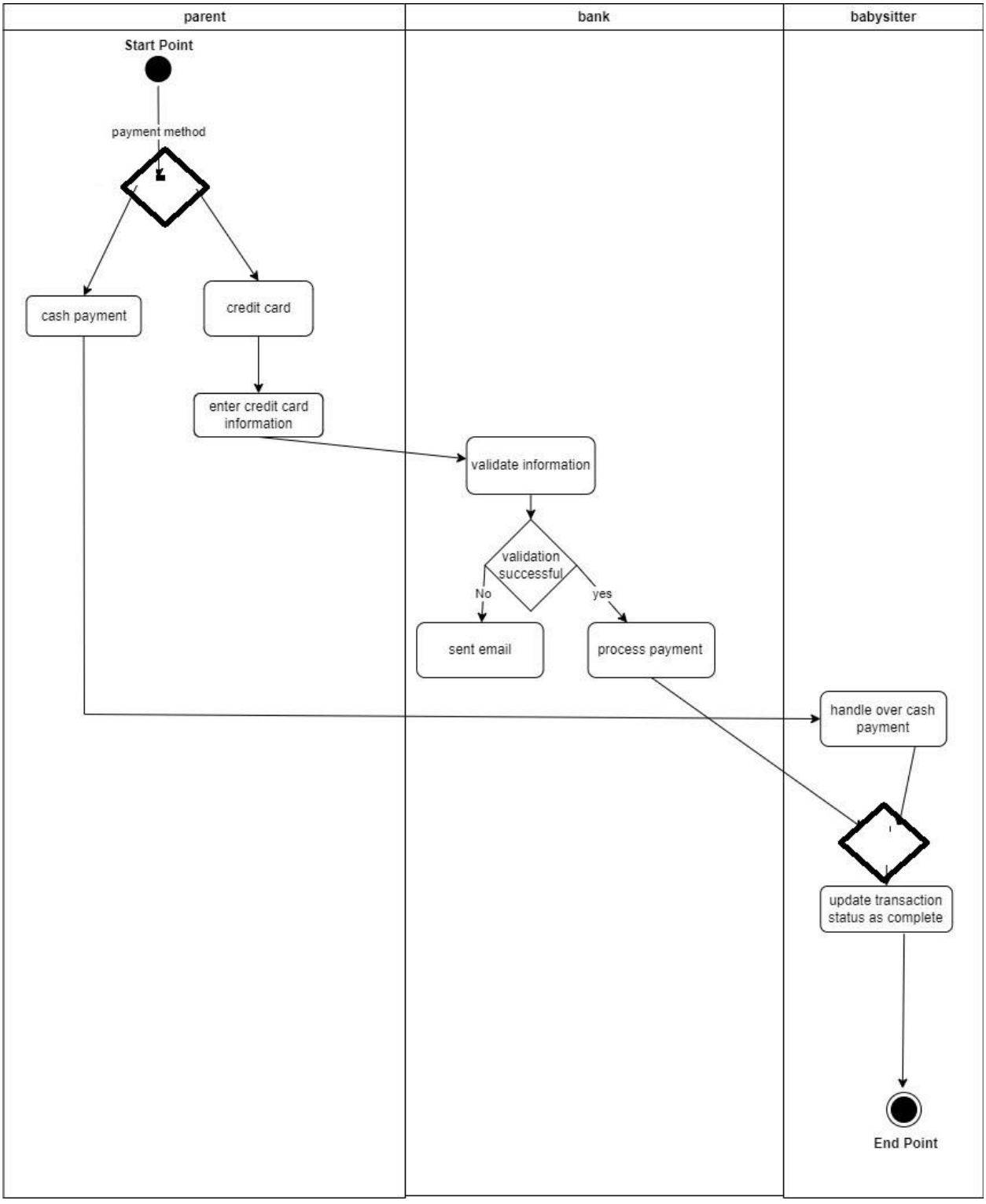
Salah abuawada

- **Book Babysitter:**

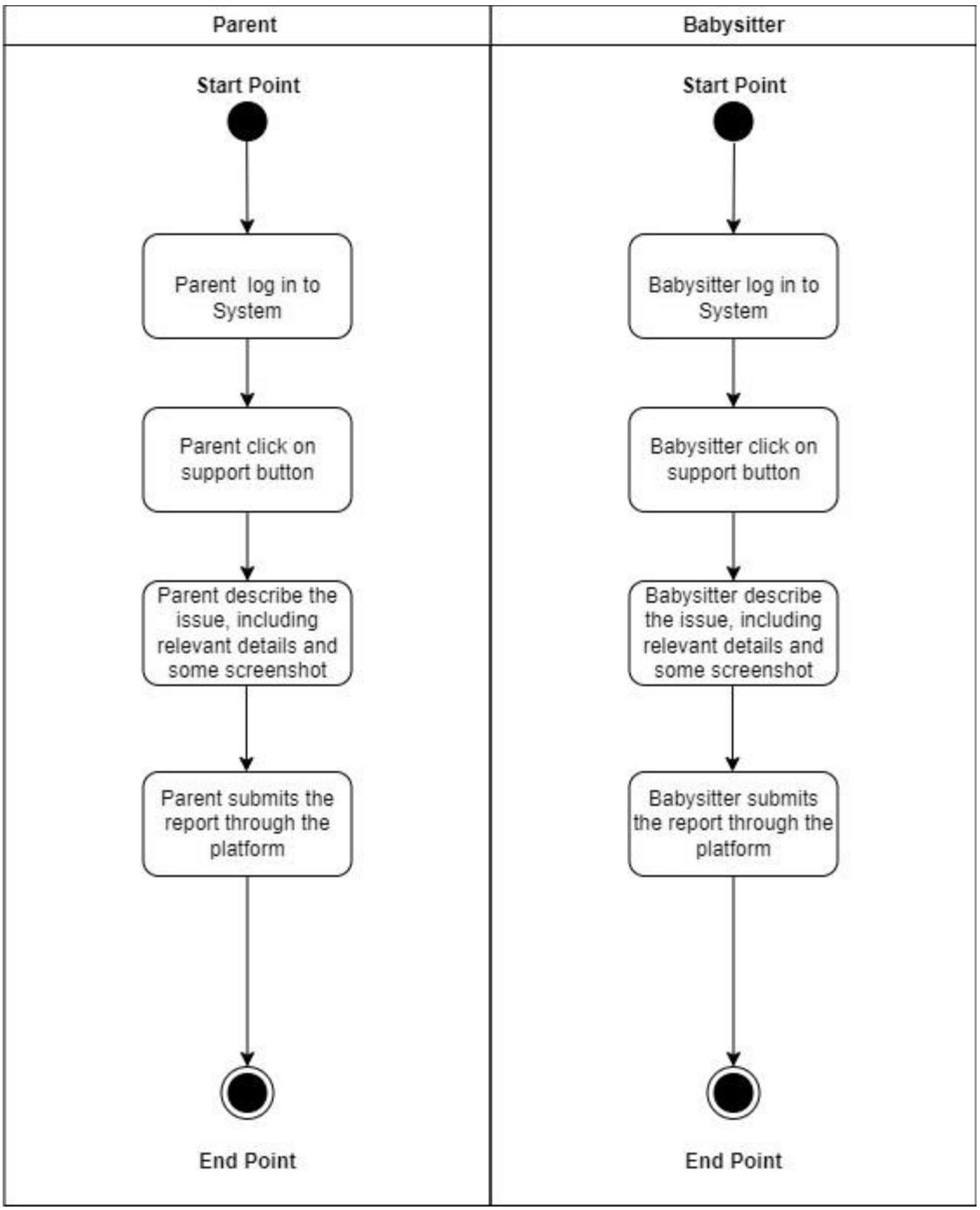


Anas Karakra

- **Payment Process:**



- **Feras Albarghouthy**
- **Send Report:**



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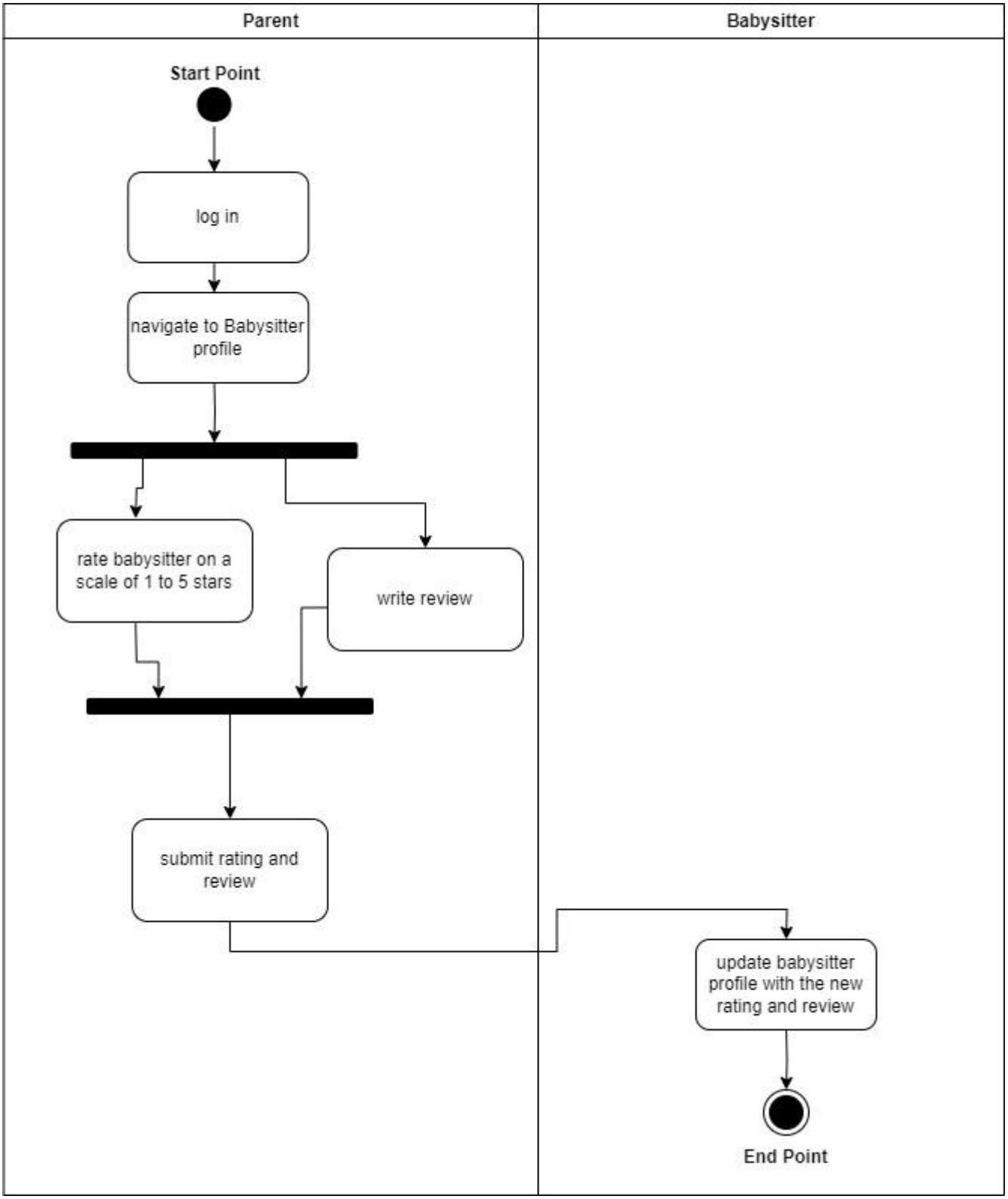
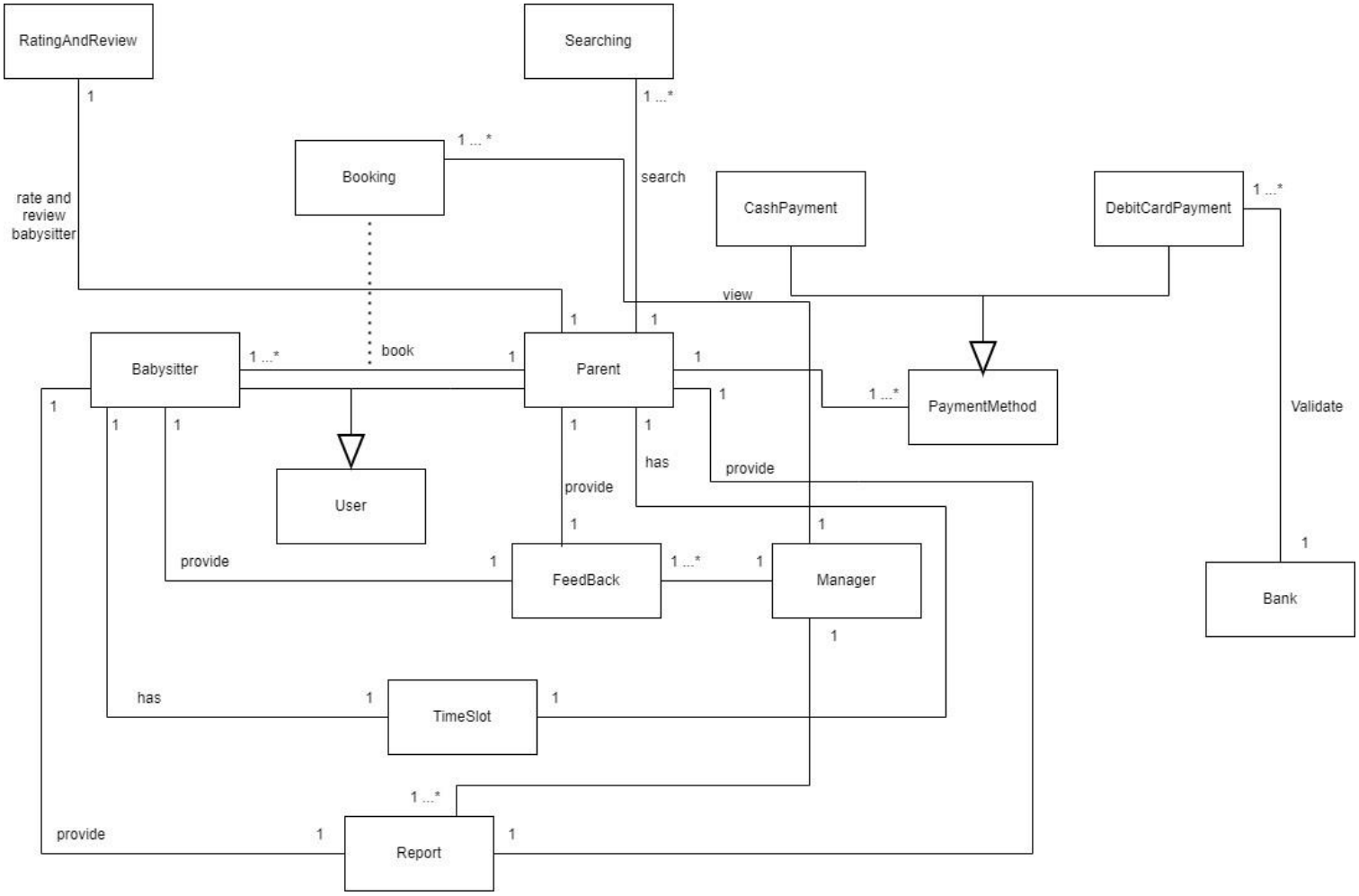
- **Yousef Sharbi**
- **Rating and Review Babysitter:**



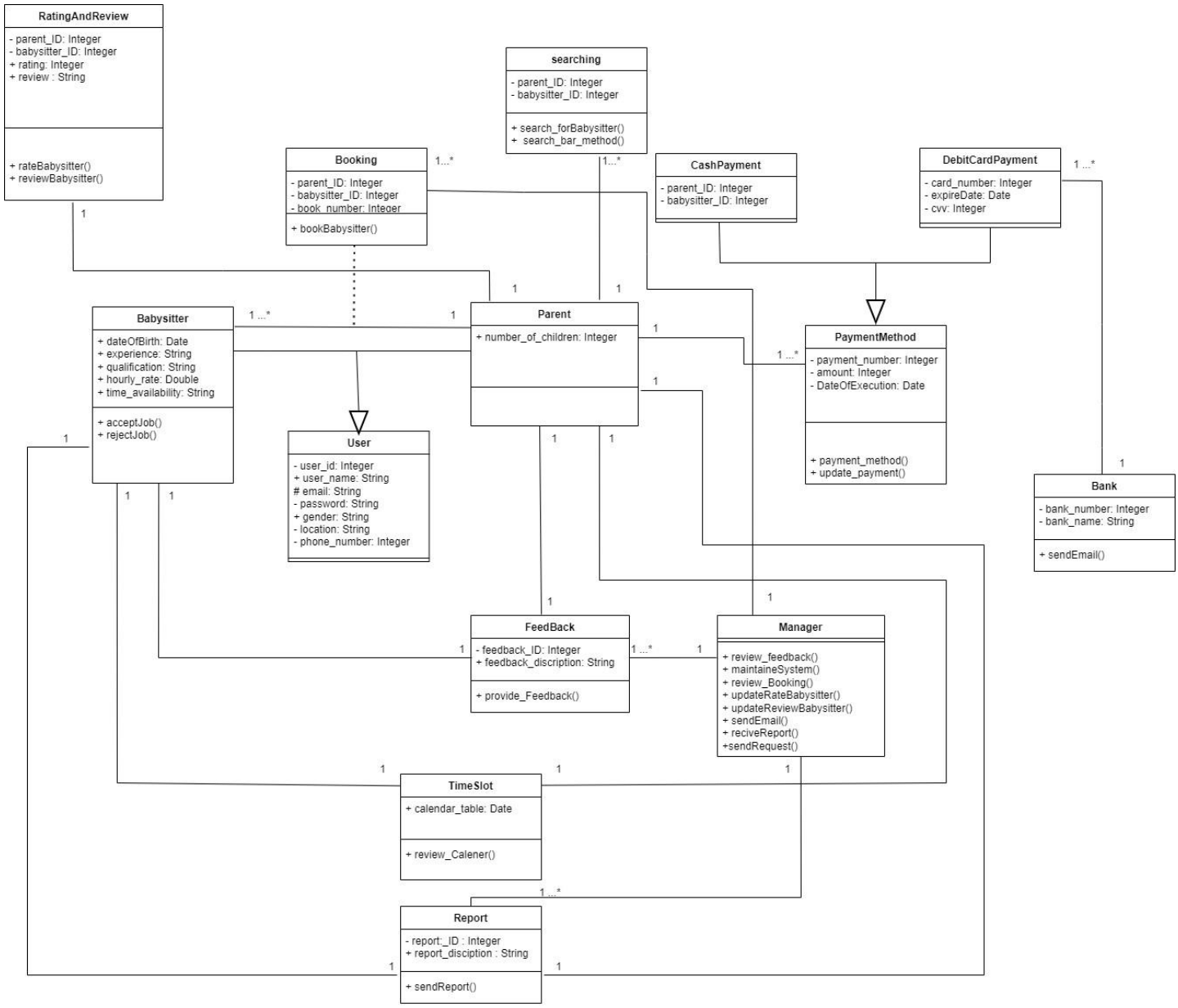
Chapter 3: System Analysis and Modelling

Group Member
Lead: yousef sharbi; contributors: [Salah: Reviewing], [Anas: Re-drawing], [feras: Discussing], [Mohammad: Finalizing]

- **Analysis Class Diagram:**



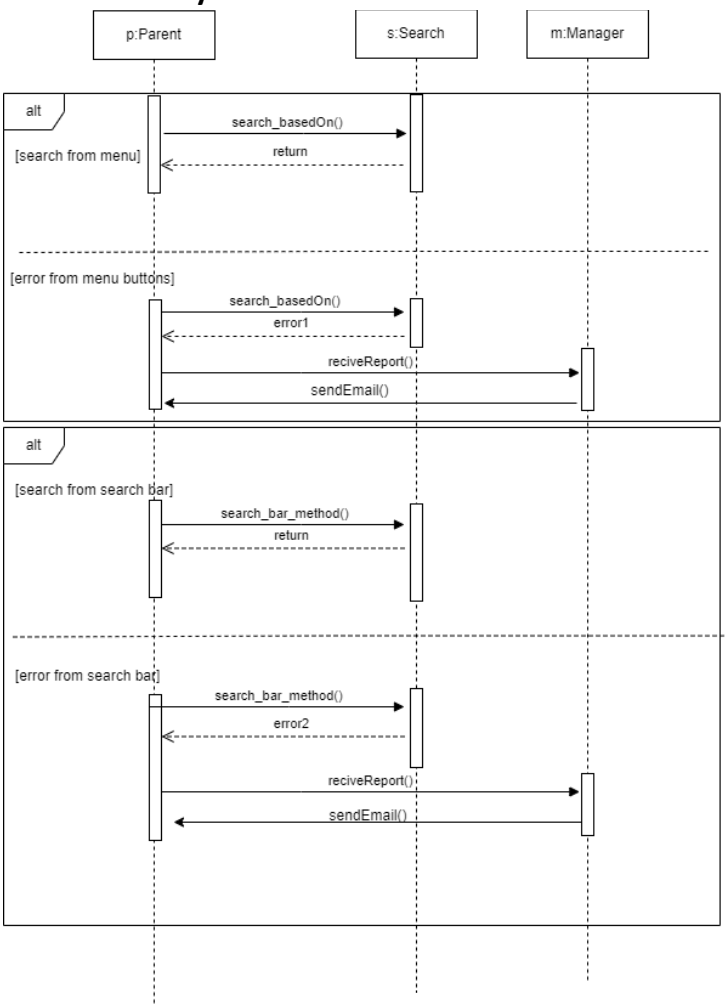
- **Detailed Class Diagram:**



System Sequence modelling and Analysis:

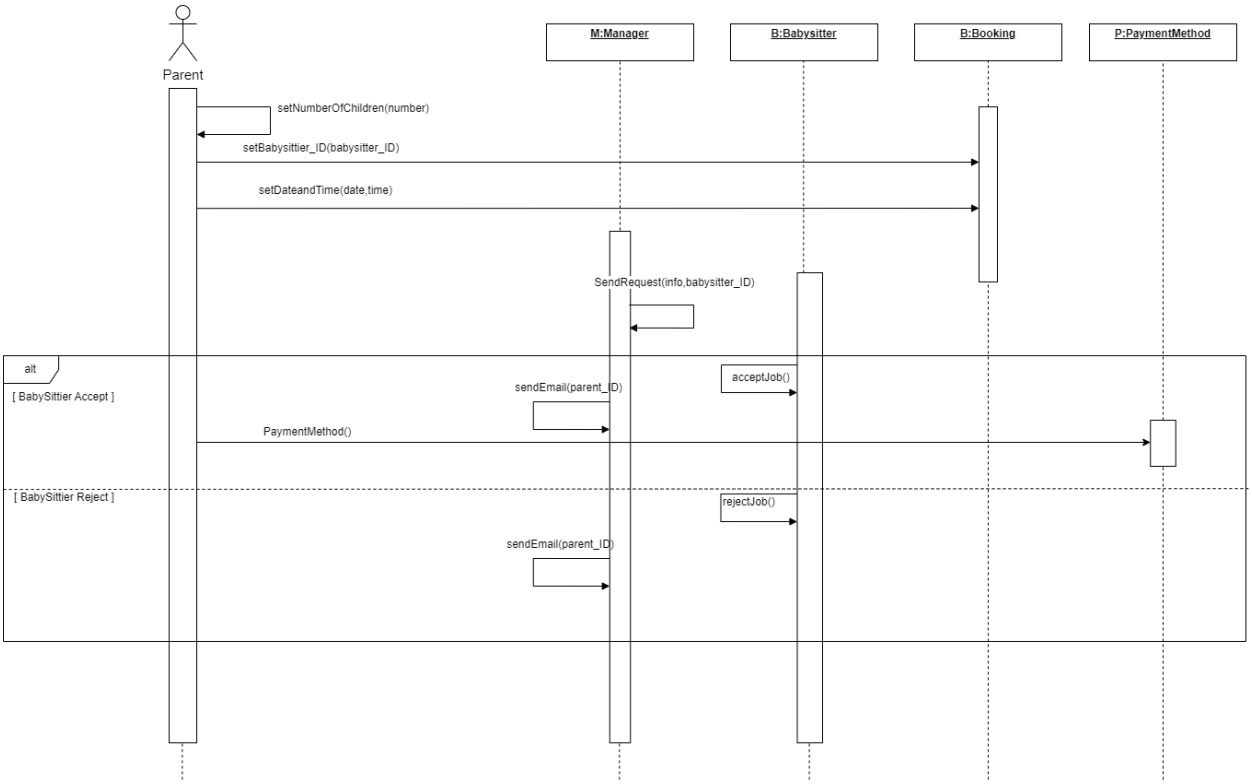
Mohammad Salem

- **Search for babysitter**



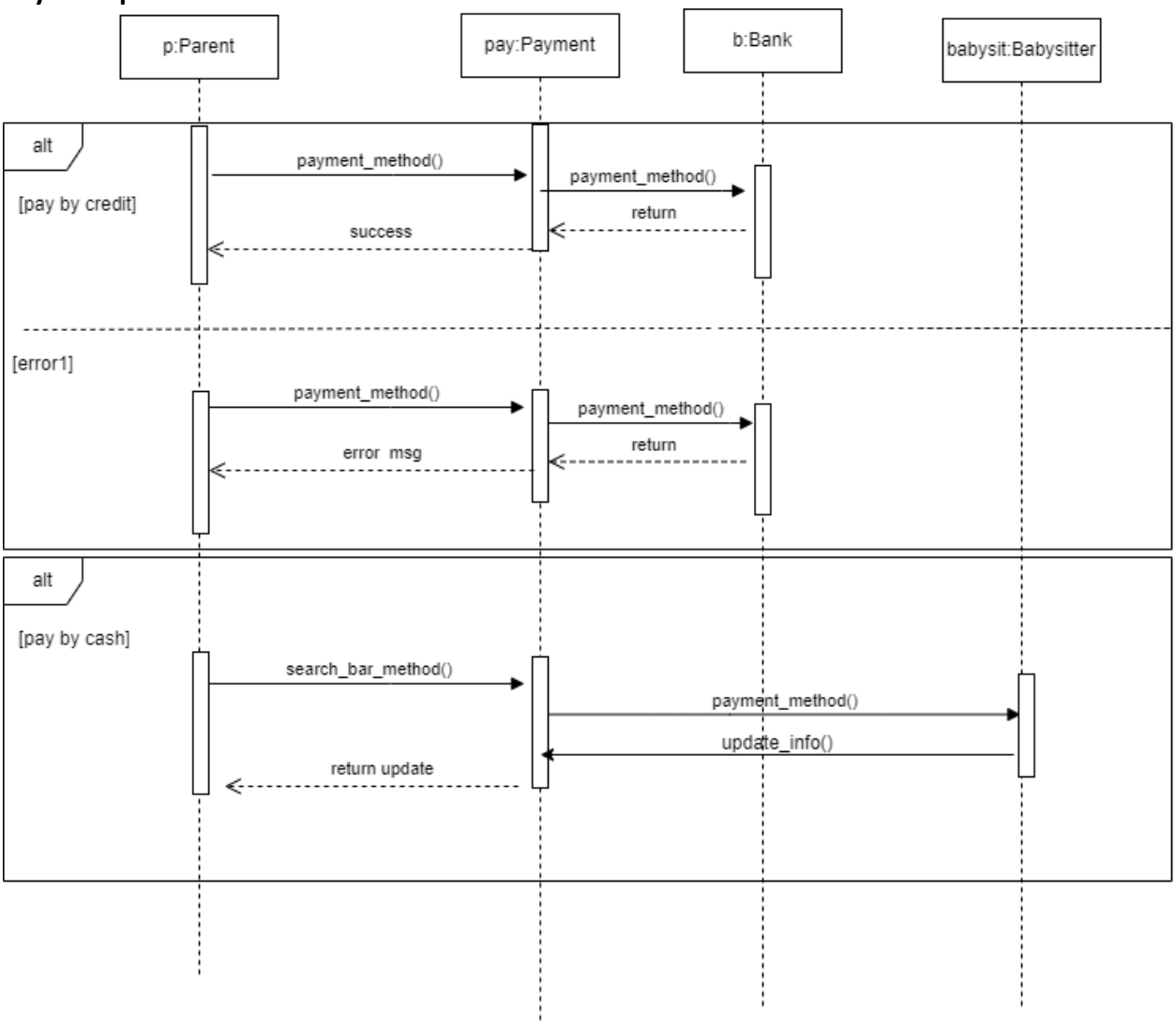
Salah Abuawada

- **Book Babysitter**



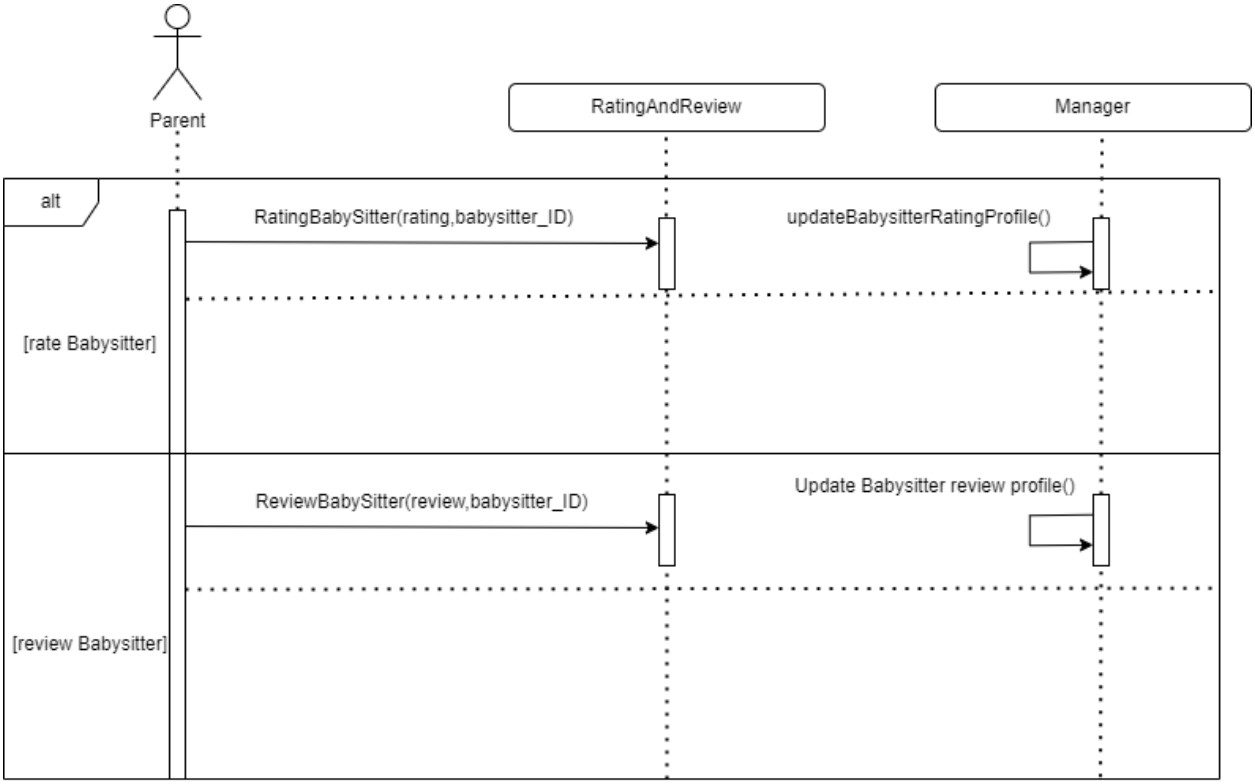
Anas Karakra

- **Payment process**

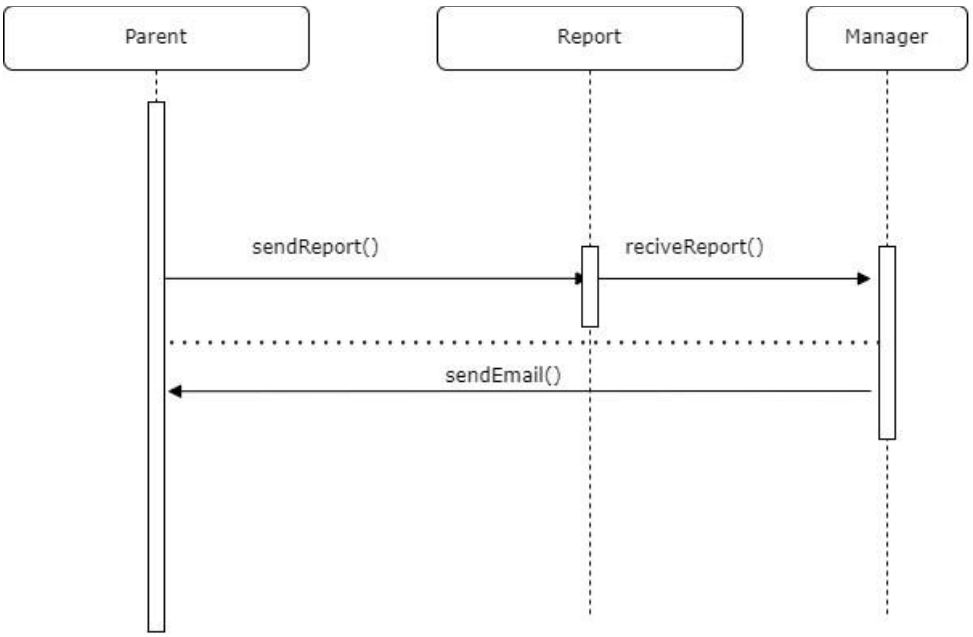


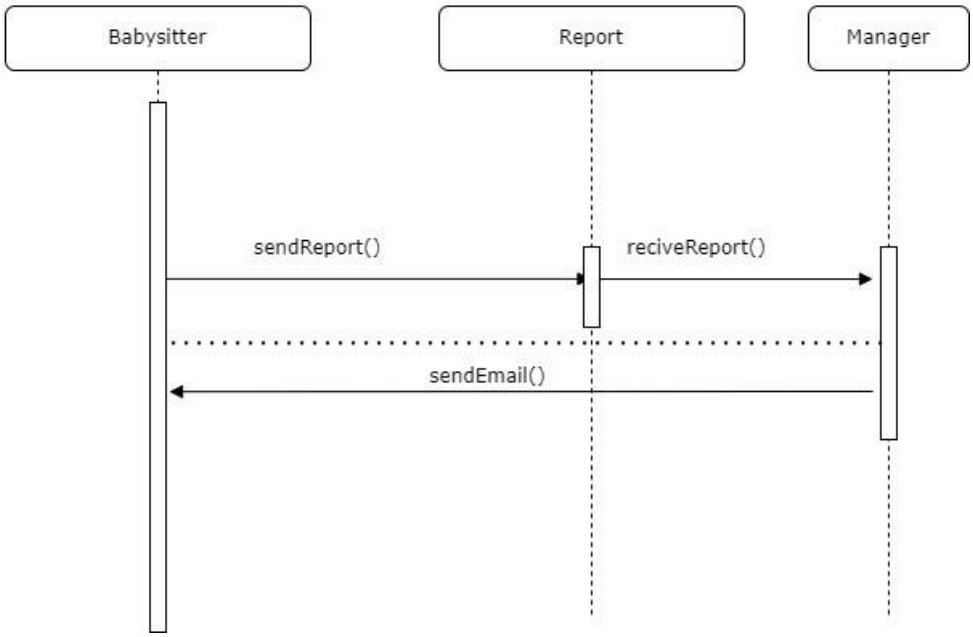
Yousef Sharbi

- **Parent review and rate babysitter**



- **Parent and babysitter send report**





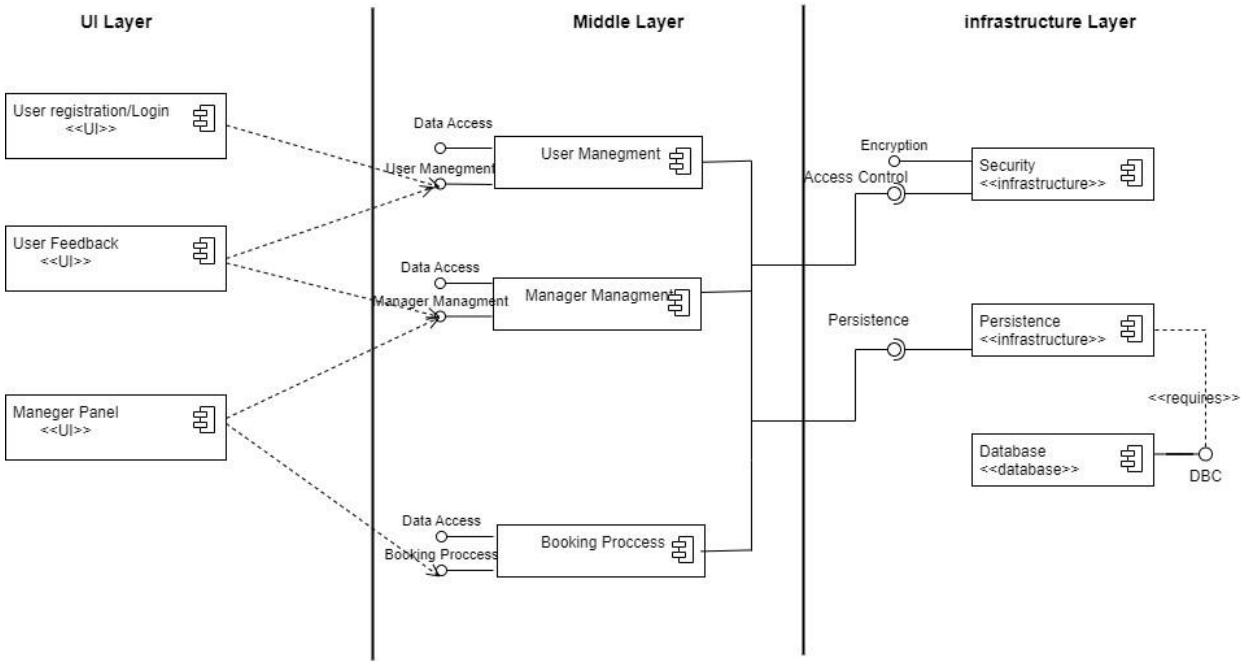
Design Goals:

Group Member
Lead: Anas; contributors: [Salah: Reviewing], [Mohammad: Re-drawing], [Yousef: Discussing], [feras: Finalizing]

High cohesion	We shall put the classes and the methods that have most interact together and have dependency on a one component.
Low coupling	We shall put the classes and the methods that less interaction together in a separated component.
Ease of learning And user friendliness	Our website is created to be easy to use and use a little of clicking to make all steps to booking and can be good of use it on 10 mins of training.
Robustness and security	Our website will delete all information of credit card details after the actor made the transaction method and for robustness our data will be stored in a cloud back-up Database

Component Diagram:

Group Member
Lead: Mohammad; contributors: [Yousef: Reviewing], [Firas: Re-drawing], [Salah: Discussing], [Anas: Finalizing]



Overall architecture diagram:

Group Member
Lead: Salah; contributors: [Anas: Reviewing], [Mohammad: Re-drawing], [Yousef: Discussing], [feras: Finalizing]

Deployment diagram:

Group Member
Lead: feras; contributors: [Anas: Reviewing], [Yousef: Re-drawing], [Salah: Discussing], [Mohammad: Finalizing]