

LIFE-SYNC

Table Design:

1. tbl_user

Primary Key: user_id

Sl. No	Field Name	Data Type	Key Constraints	Description
1	user_id	INT	PRIMARY KEY	Unique ID for each user
2	username	VARCHAR (100)	NOT NULL	Username of the user
3	email	VARCHAR (150)	UNIQUE, NOT NULL	User's email address
4	password	VARCHAR (255)	NOT NULL	Hashed password
5	created_at	DATETIME	DEFAULT CURRENT_TIME	Account creation timestamp
6	role	ENUM('admin','free','premium')	NOT NULL	User role: admin, free, or premium

2. tbl_admin

Primary Key: admin_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	admin_id	INT	PRIMARY KEY	Unique ID for each admin
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	permissions	TEXT	NOT NULL	List of admin-specific permissions (view/delete free users, approve premium users)

3. tbl_todo

Primary Key: todo_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	todo_id	INT	PRIMARY KEY	Unique ID for each to-do item
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	task	TEXT	NOT NULL	Task description
4	is_completed	BOOLEAN	DEFAULT FALSE	Task completion status
5	category	VARCHAR(50)	NULLABLE	Task category (optional for premium users)

4. tbl_expense

Primary Key: expense_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	expense_id	INT	PRIMARY KEY	Unique ID for each expense
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	amount	DECIMAL(10,2)	NOT NULL	Expense amount
4	date	DATE	NOT NULL	Expense date
5	category	VARCHAR(50)	NULLABLE	Expense category

5. tbl_health

Primary Key: health_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	health_id	INT	PRIMARY KEY	Unique ID for each health task
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	task	TEXT	NOT NULL	Health task description
4	is_completed	BOOLEAN	DEFAULT FALSE	Task completion status

6. tbl_calendar

Primary Key: event_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	event_id	INT	PRIMARY KEY	Unique ID for each calendar event
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	title	VARCHAR(100)	NOT NULL	Event title
4	date	DATE	NOT NULL	Event date

7. tbl_notification

Primary Key: notification_id

Foreign Key: user_id REFERENCES tbl_user(user_id)
event_id REFERENCES tbl_calender(event_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	notification_id	INT	PRIMARY KEY	Unique ID for each notification
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	message	TEXT	NOT NULL	Notification message
4	is_read	BOOLEAN	DEFAULT FALSE	Notification read status
5	event_id	INT	FOREIGN KEY	References event_id in tbl_calender

8. tbl_feedback

Primary Key: feedback_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	feedback_id	INT	PRIMARY KEY	Unique ID for each feedback
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	feedback	TEXT	NOT NULL	User feedback
4	submitted_at	DATETIME	DEFAULT CURRENT_TIME	Feedback submission timestamp

9. tbl_payment

Primary Key: payment_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	payment_id	INT	PRIMARY KEY	Unique ID for each payment
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	amount	DECIMAL(10,2)	NOT NULL	Payment amount
4	payment_date	DATETIME	DEFAULT CURRENT_TIME	Payment timestamp

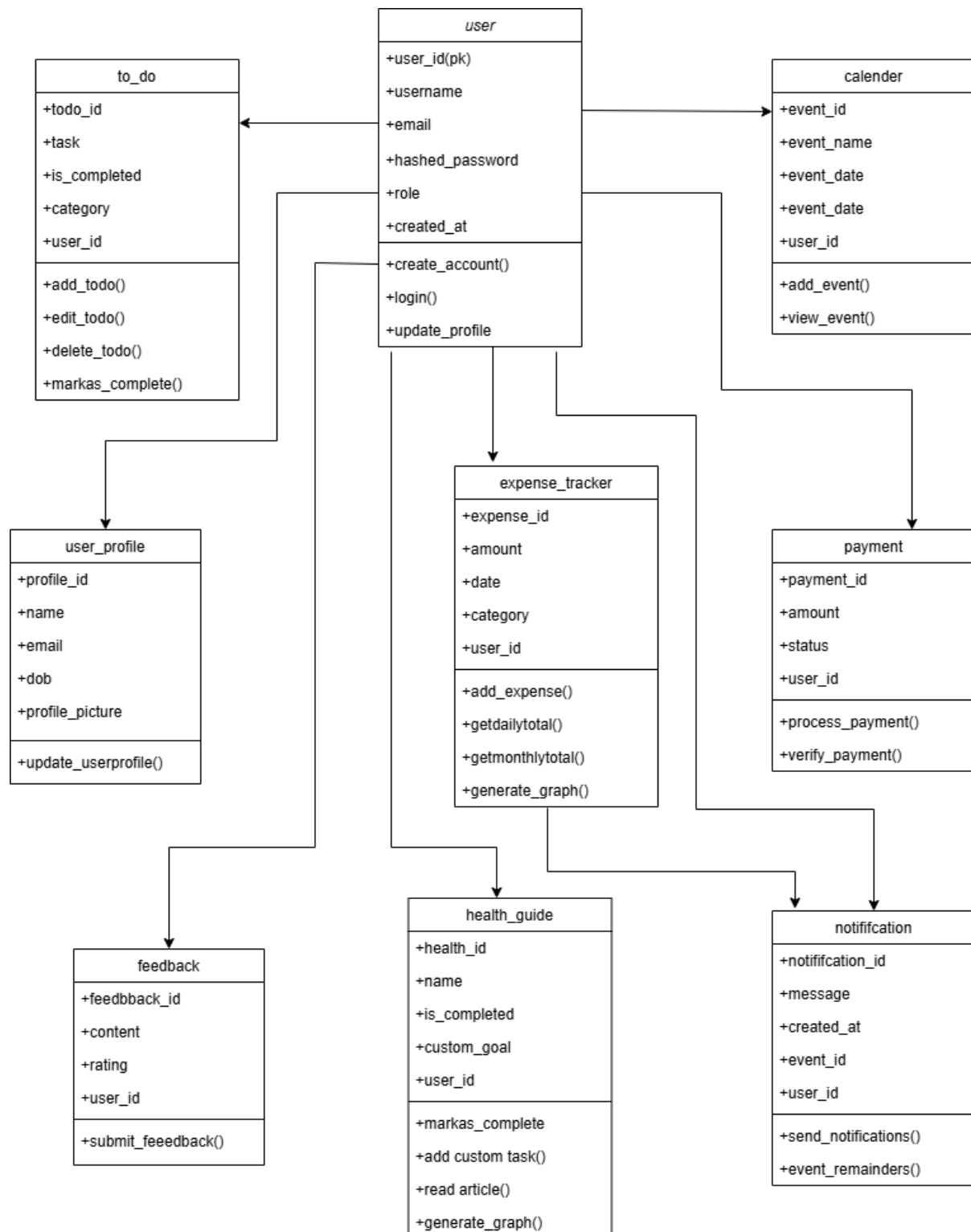
10. tbl_userprofile

Primary Key: profile_id

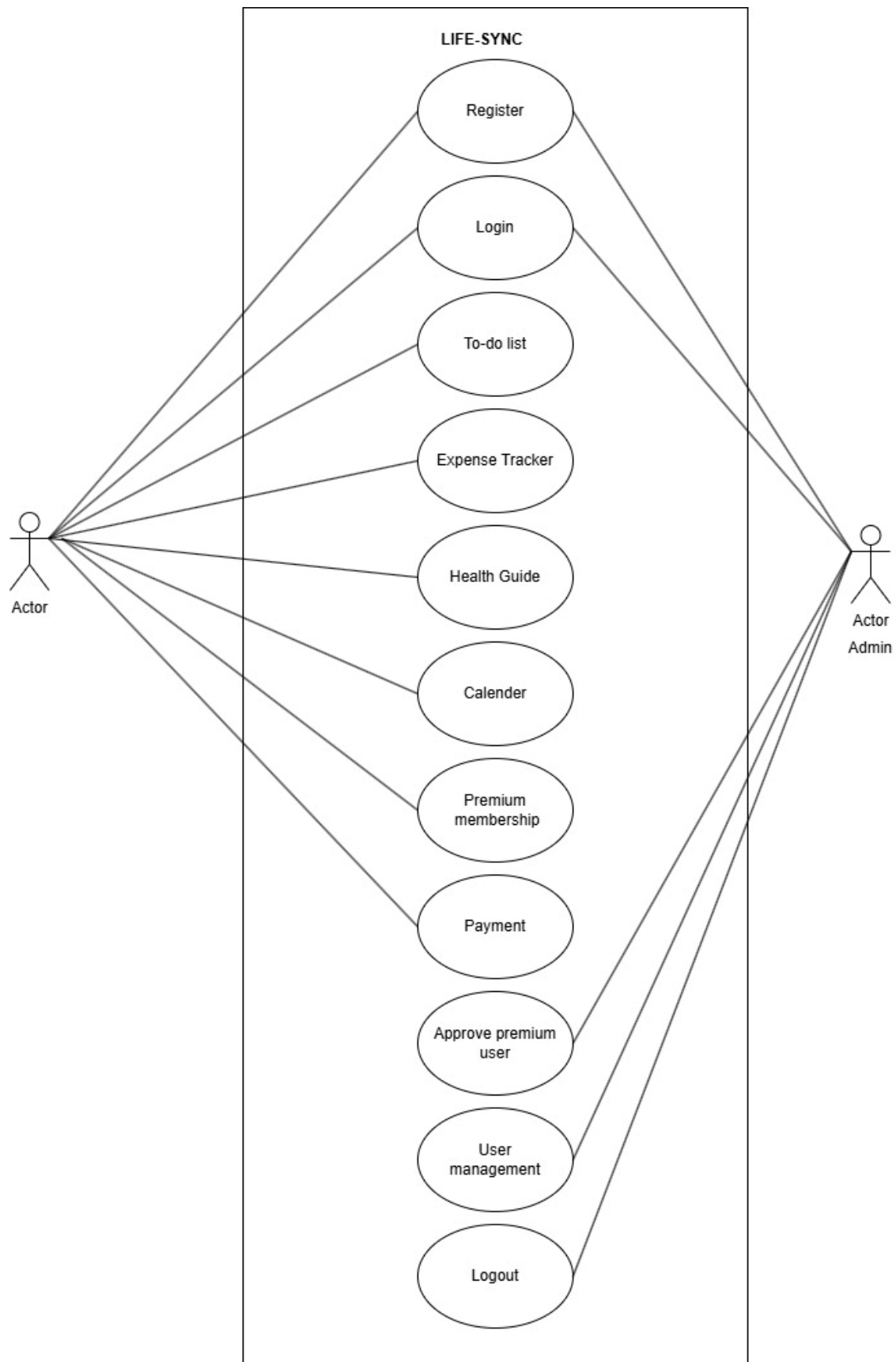
Foreign Key: user_id REFERENCES tbl_user(user_id)

Sl. No	Field Name	Data Type	Key Constraints	Description
1	profile_id	INT	PRIMARY KEY	Unique ID for each profile
2	user_id	INT	FOREIGN KEY	References user_id in tbl_user
3	name	VARCHAR(100)	NOT NULL	User's full name
4	profile_picture	TEXT	NULLABLE	Path/URL to the user's profile picture
5	dob	DATE	NULLABLE	User's date of birth
6	email	VARCHAR(150)	UNIQUE, NOT NULL	User's email address

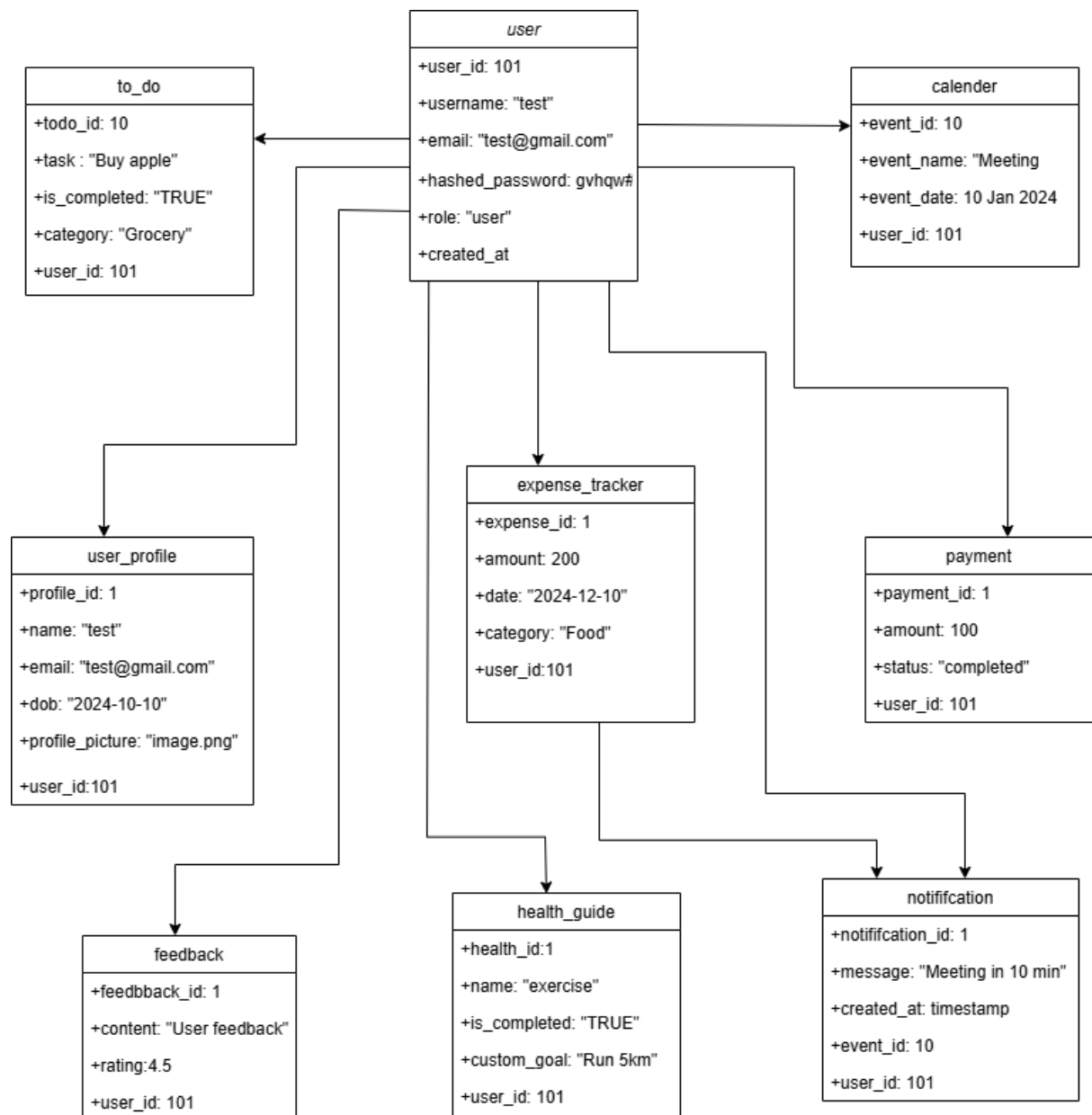
Class diagram:



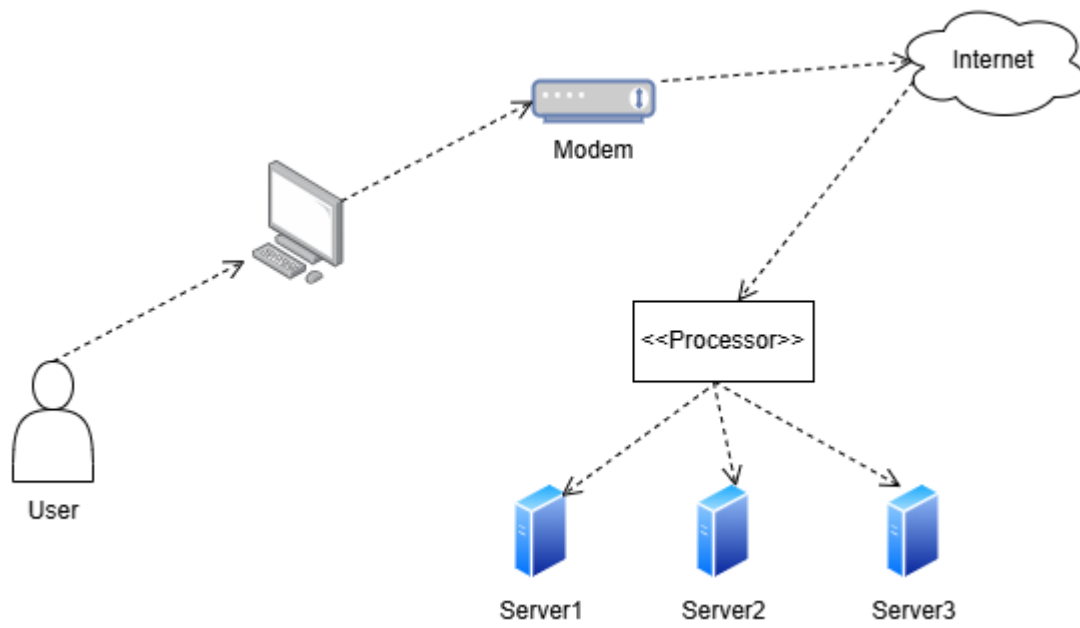
Use Case Diagram:



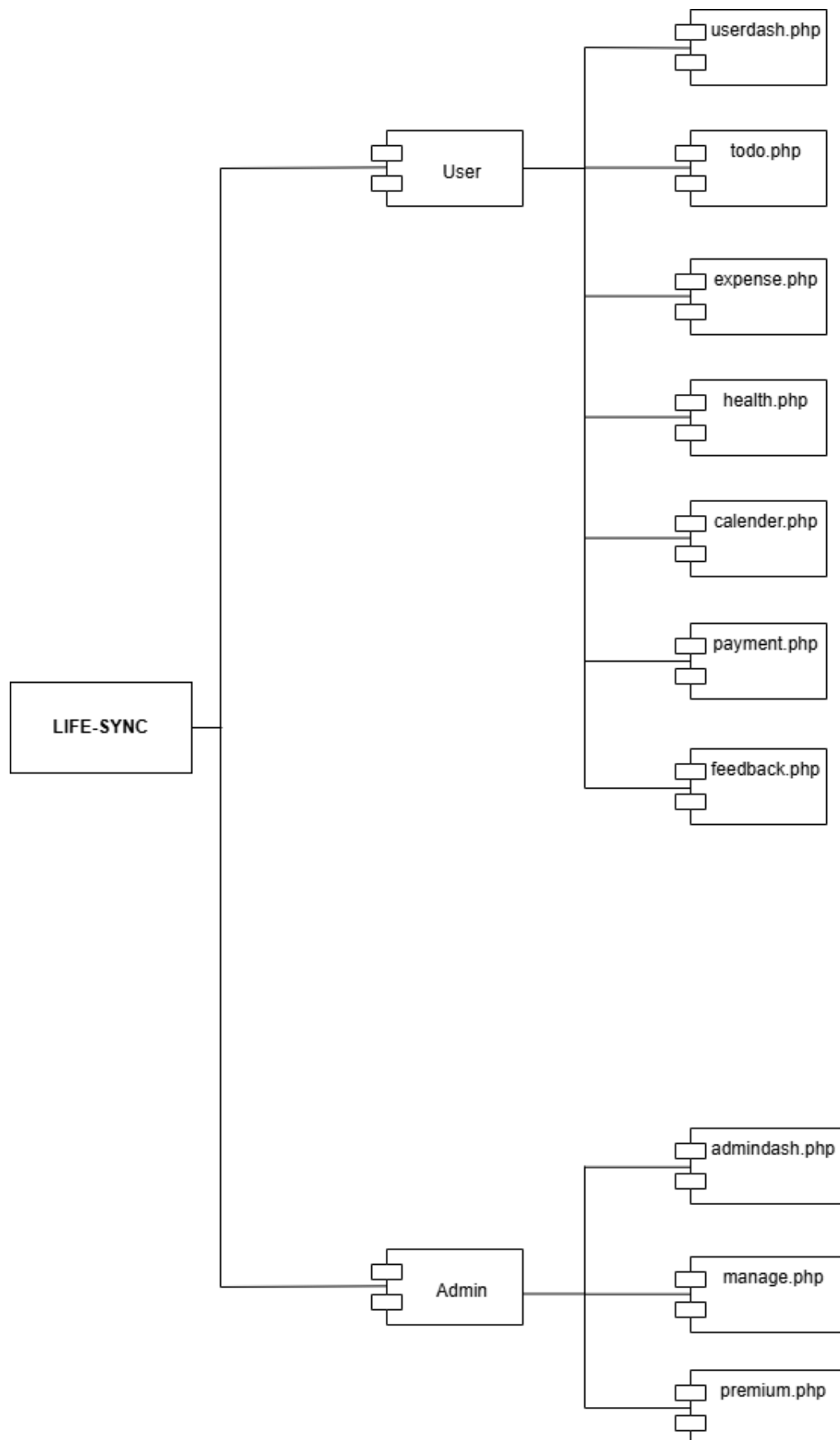
Object diagram:



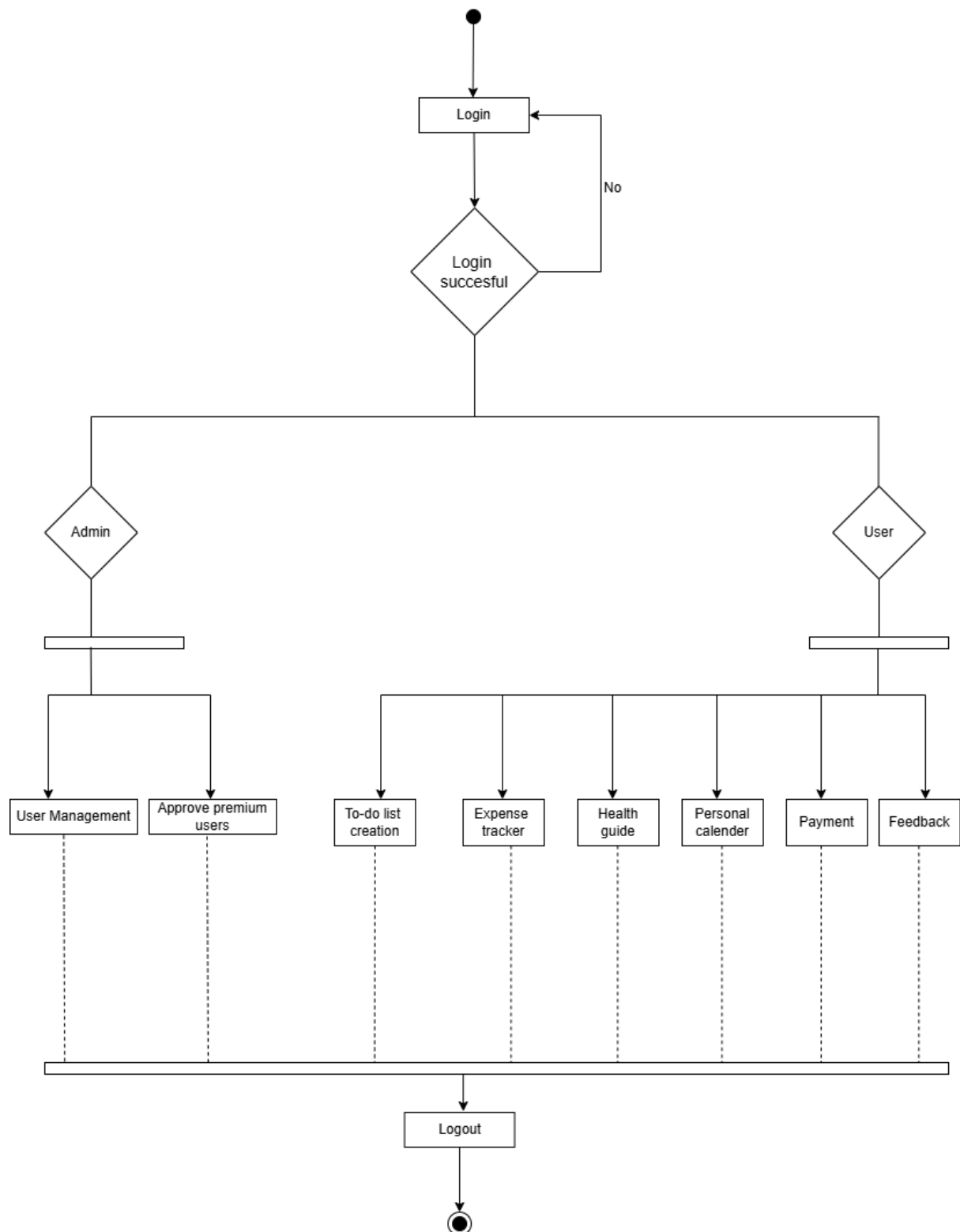
Deployment diagram:



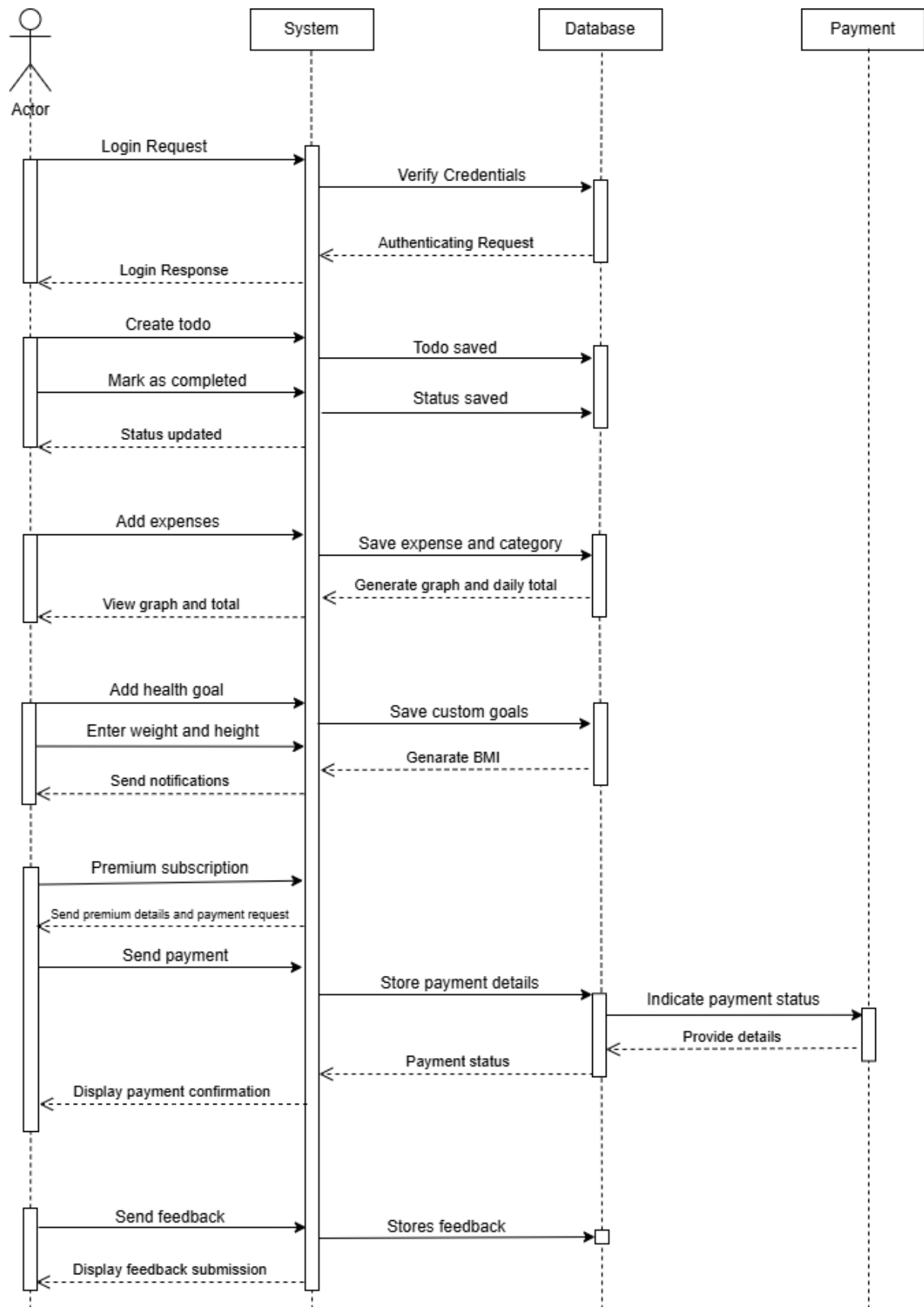
Component diagram:



Activity diagram:



Sequence diagram:



State chart diagram:

