LIFE-SYNC

Table Design:

1. tbl_user

Primary Key: user_id

Sl.	Field	Data Type	Key Constraints	Description
No	Name			
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.	Field Name	Data	Key	Description
No		Туре	Constraints	
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)

${\bf 3.} \quad tbl_todo$

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

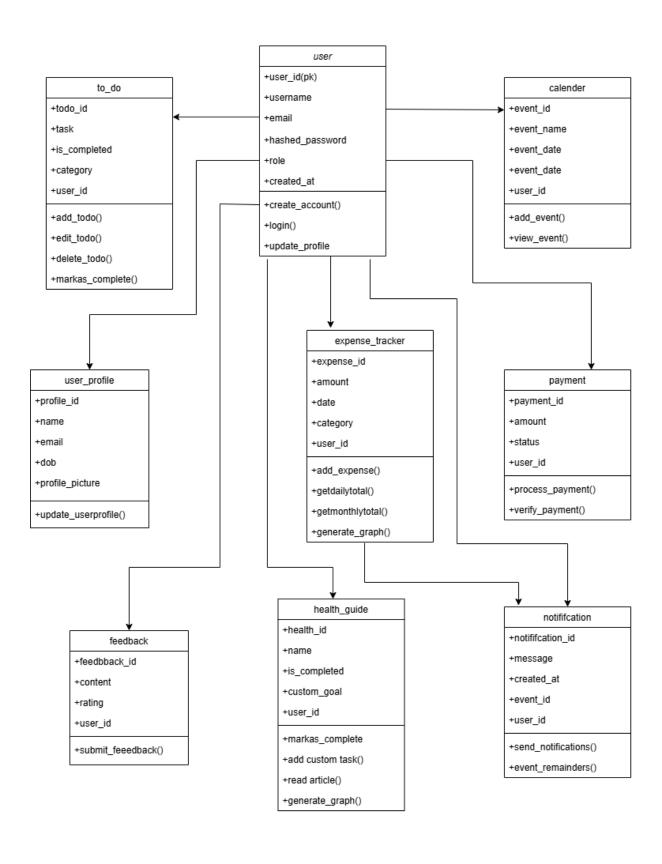
10. tbl_userprofile

Primary Key: profile_id

Foreign Key: user_id REFERENCES tbl_user(user_id)

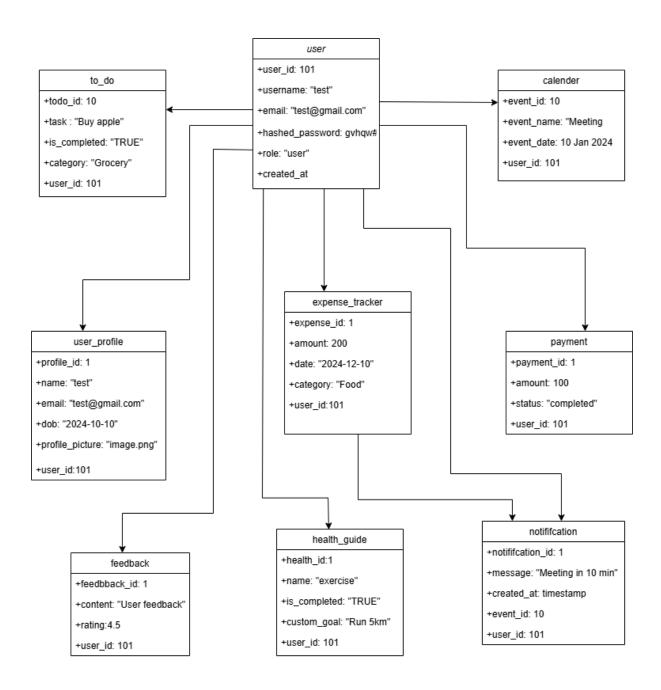
Sl. No	Field Name	Data Type	Key Constraints	Description
1	profile_id	INT	PRIMARY KEY	Unique ID for each profile
2	user_id	INT	FOREIGN KEY	References user_id in
				tbl_user
3	name	VARCHAR(100)	NOT NULL	User's full name
4	profile_picture	TEXT	NULLABLE	Path/URL to the user's
				profile picture
5	dob	DATE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

Class diagram:

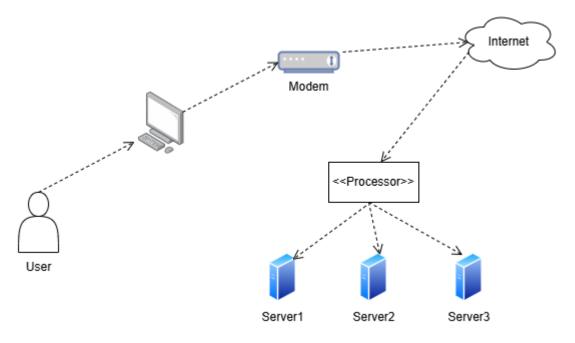


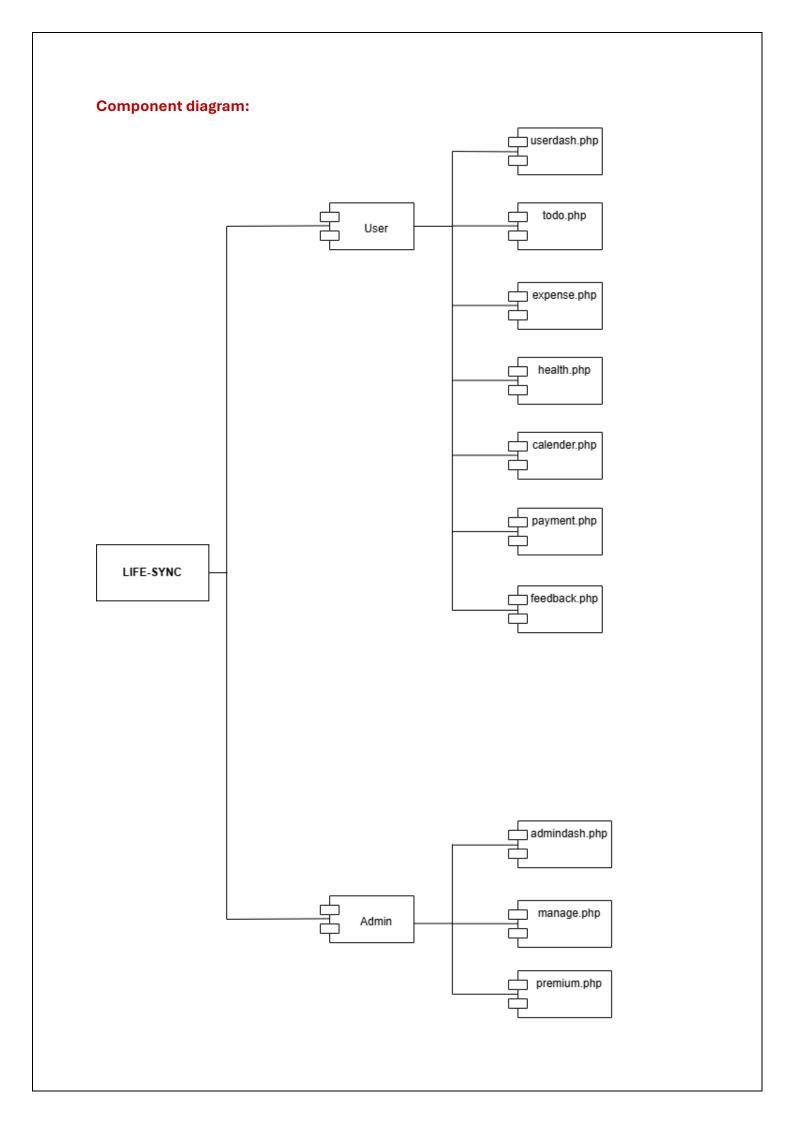
Use Case Diagram: LIFE-SYNC Register Login To-do list Expense Tracker Health Guide Actor Actor Admin Calender Premium membership Payment Approve premium user User management Logout

Object diagram:



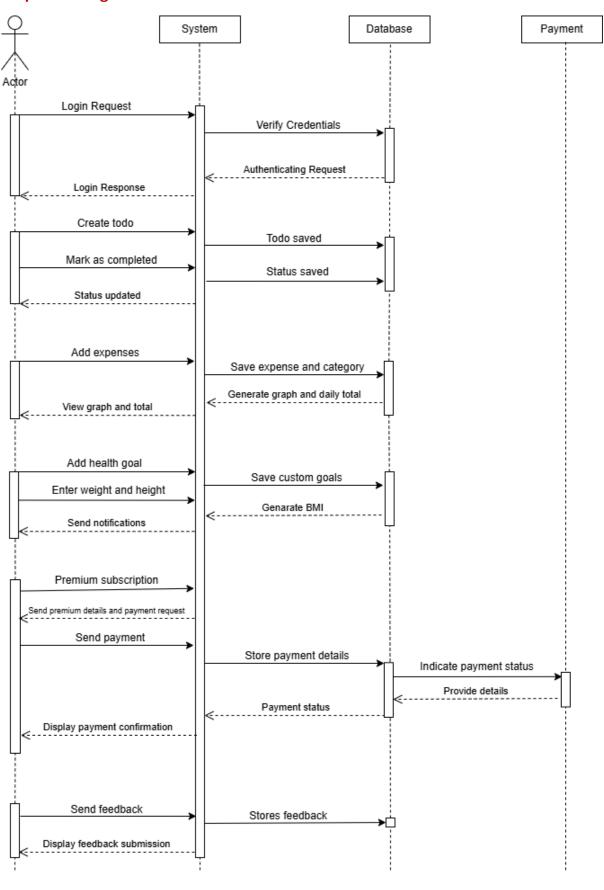
Deployment diagram:





Activity diagram: Login Login succesful Admin User Approve premium users To-do list creation Expense tracker Health guide Personal calender User Management Payment Feedback Logout

Sequence diagram:



State chart diagram: Empty Browsing Logged in State Personal To-do list Expense Health creation tracker guide calender View task Mark as completed Set custom goal Add todo Delete todo Add event Delete event Edit event Add expense Categorize expense Generate graph Edit todo Mark as complete