Pomodify App

User
- Should be able to register and login to the app.
- Should be able to create, update, and delete activities.
- Should be able to start customizable Pomodoro sessions with work and break durations.
- Should be able to add, edit, and delete notes after each session.
- Should be able to view reports and summaries of productivity.

The Pomodify App should expose the following APIs:

API endpoint	register-user	
method	post	
Request Params	**Type**	**Description**
username	string	Desired username
username	string	User's email address
password	string	Password for authentication
This API registers a new user account. It validates the email to ensure no duplicates exist, then creates a user profile with a unique ID.		
Success		
Redirect Params	**Type**	**Description**
message	string	Registration success message
userId	string	Generated user ID
Sample Response		
{ "message": "User registered successfully", "userId": "u12345" }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error when email already exists
Sample Response		
{ "error_message": "Email already exists" }		

API endpoint	login-user	
method	post	
Request Params	**Type**	**Description**
email	string	Registered email address
password	string	Account password
Authenticates a user and issues a JWT token to be used for subsequent API requests.		
Success		
Redirect Params	**Type**	**Description**
token	string	JWT token for authentication
expiresIn	number	Expiration time in seconds
Sample Response		
{ "token": "<jwt_token>", "expiresIn": 3600 }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Invalid login credentials
Sample Response		
{ "error_message": "Invalid credentials" }		

API endpoint	update-profile	
method	put	
Request Params	**Type**	**Description**
username	string	Updated username
email	string	Updated email address
Updates the profile of the authenticated user.		

Success		
Redirect Params	**Type**	**Description**
message	string	Profile updated successfully
Sample Response		
{ "message": "Profile updated successfully" }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error when update fails
Sample Response		
{ "error_message": "Invalid input" }		

API endpoint	delete-account
method	delete
Deletes the authenticated user's account permanently.	

Success		
Redirect Params	**Type**	**Description**
message	string	Account deleted successfully
Sample Response		
{ "message": "Account deleted successfully" }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error deleting account
Sample Response		
{ "error_message": "Account not found" }		

API endpoint	create-activity	
method	post	
Request Params	**Type**	**Description**
name	string	Name of the activity
Creates a new activity for the user. Activities organize Pomodoro sessions into categories.		
Success		
Redirect Params	**Type**	**Description**
id	string	Generated ID of activity
name	string	Name of the activity
Sample Response		
{ "id": "a101", "name": "Study Math" }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Activity already exists
Sample Response		
{ "error_message": "Activity already exists" }		

API endpoint	update-activity	
method		
Request Params	**Type**	**Description**
id	string	ID of the activity
name	string	Updated name of activity
Updates the name of an existing activity.		
Success		
Redirect Params	**Type**	**Description**

id	string	ID of the activity
name	string	Updated name of activity
Sample Response		
{ "id": "a101", "name": "Study Physics" }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error when update fails
Sample Response		
{ "error_message": "Activity not found" }		

API endpoint	**delete-activity**	
method	delete	
Request Params	**Type**	**Description**
id	string	ID of the activity
Deletes an activity owned by the user.		
Success		
Redirect Params	**Type**	**Description**
message	string	Activity deleted successfully
Sample Response		
{ "message": "Activity deleted successfully" }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error when activity not found
Sample Response		
{ "error_message": "Activity not found" }		

API endpoint	get-activities	
method	get	
Retrieves all activities created by the authenticated user.		
Success		
Redirect Params	**Type**	**Description**
id	string	Activity ID
name	string	Name of activity
Sample Response		

[
  { "id": "a101", "name": "Study Math" },
  { "id": "a102", "name": "Learn Angular" }
]		

Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error when no data found
Sample Response		
{ "error_message": "No activities found" }		

API endpoint	start-session	
method	post	
Request Params	**Type**	**Description**
activityId	string	ID of the related activity
workDuration	number	Work duration in minutes
breakDuration	number	Break duration in minutes
cycles	number	Number of Pomodoro cycles to run
Starts a Pomodoro session linked to an activity. Sessions are automatically recorded.		
Success		

Redirect Params	Type	Description
id	string	Generated ID of session
activityId	string	Related activity ID
status	string	Session status (running)
startedAt	string	Session start timestamp
Sample Response		

```
{
  "id": "s555",
  "activityId": "a101",
  "status": "running",
  "startedAt": "2025-09-26T08:00:00Z"
}
```

Fail

Redirect Params	Type	Description
error_message	string	Error when activity not found
Sample Response		

{ "error_message": "Invalid activity ID" }

API endpoint	get-sessions
method	get

Retrieves all Pomodoro sessions of the authenticated user.

Success

Redirect Params	Type	Description
id	string	Session ID
activityId	string	Related activity ID
duration	number	Duration in minutes
notes	string	Notes attached to the session
Sample Response		

```
[
  {
    "id": "s555",
    "activityId": "a101",
    "duration": 25,
    "notes": "Reviewed algebra"
  }
]
```

Fail

Redirect Params	Type	Description
error_message	string	No sessions available

Sample Response

{ "error_message": "No sessions found" }

API endpoint	add-note	
method	post	
Request Params	**Type**	**Description**
sessionId	string	Related session ID
content	string	Content of the note

Adds a note to a Pomodoro session. Notes help summarize accomplishments and reflections.

Success

Redirect Params	Type	Description
noteId	string	Generated note ID
sessionId	string	Related session ID
content	string	Content of the note

Sample Response

{ "noteId": "n777", "sessionId": "s555", "content": "Finished chapter 1 exercises." }

Fail

Redirect Params	Type	Description

error_message	string	Error if session not found
Sample Response		
{ "error_message": "Session not found" }		

API endpoint	update-note	
method	put	
Request Params	**Type**	**Description**
noteId	string	ID of the note
content	string	Updated note content
Updates the content of an existing session note.		
Success		
Redirect Params	**Type**	**Description**
noteId	string	ID of the updated note
content	string	Updated note content
Sample Response		
{ "noteId": "n777", "content": "Reviewed chapter 2 instead." }		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error when note not found
Sample Response		
{ "error_message": "Note not found" }		

API endpoint	delete-note	
method		
Request Params	**Type**	**Description**
noteId	string	ID of the note

Deletes a session note permanently.	
Success	

Redirect Params	Type	Description
message	string	Note deleted successfully

Sample Response
{ "message": "Note deleted successfully" }

Fail

Redirect Params	Type	Description
error_message	string	Error when note not found

Sample Response
{ "error_message": "Note not found" }

API endpoint	reports-summary
method	get

Generates a summary of all activities and sessions for the authenticated user. Includes totals and breakdowns per activity.

Success

Redirect Params	Type	Description
totalSessions	number	Total number of sessions
totalHours	number	Total hours spent
activities	array	Hours spent per activity

Sample Response

```
{
  "totalSessions": 120,
  "totalHours": 50,
  "activities": [
    { "name": "Math", "hours": 20 },
    { "name": "Angular", "hours": 30 }
  ]
}
```

}		
Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error when no data is available
Sample Response		
{ "error_message": "No data available" }		

API endpoint	**reports-activity**	
method	get	
Request Params	**Type**	**Description**
activityId	string	ID of the activity
Generates a detailed progress report for a specific activity.		
Success		
Redirect Params	**Type**	**Description**
activityId	string	Related activity ID
totalSessions	number	Total sessions for this activity
totalHours	number	Hours spent on this activity
trend	string	Trend (increasing/decreasing)
Sample Response		

{
 "activityId": "a101",
 "totalSessions": 45,
 "totalHours": 18,
 "trend": "increasing"
 }		

Fail		
Redirect Params	**Type**	**Description**
error_message	string	Error if activity not found

Sample Response
{ "error_message": "Activity not found" }

Endpoints

User Management
1. register-user
2. login-user
3. update-profile
4. delete-account

Activities
5. create-activity
6. update-activity
7. delete-activity
8. get-activities

Sessions
9. start-session
10. get-sessions

Notes
11. add-note
12. update-note
13. delete-note

Reports
14. reports-summary
15. reports-activity