



Prepared by Alaa, Yousef, Ali, Roaa

# Space Task Manager

One Place to wrap your head around busy you

May, 2025



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**Email address**

alaa.ashraf.uni@gmail.com

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# Organize Your Universe, One Task at a Time.

Space Task Manager helps you conquer your daily missions with clarity and focus. Streamline your workflow, collaborate seamlessly, and reach your goals faster than light speed.

[View My Tasks](#)

## Why Choose Us?

### Intuitive Design

A clean, Airbnb-inspired interface that's easy to navigate and a joy to use.

### Powerful Features

Manage deadlines, track progress, and organize attachments effortlessly.

### Seamless Collaboration

(Future) Share tasks and projects with your team members.

## Your Profile



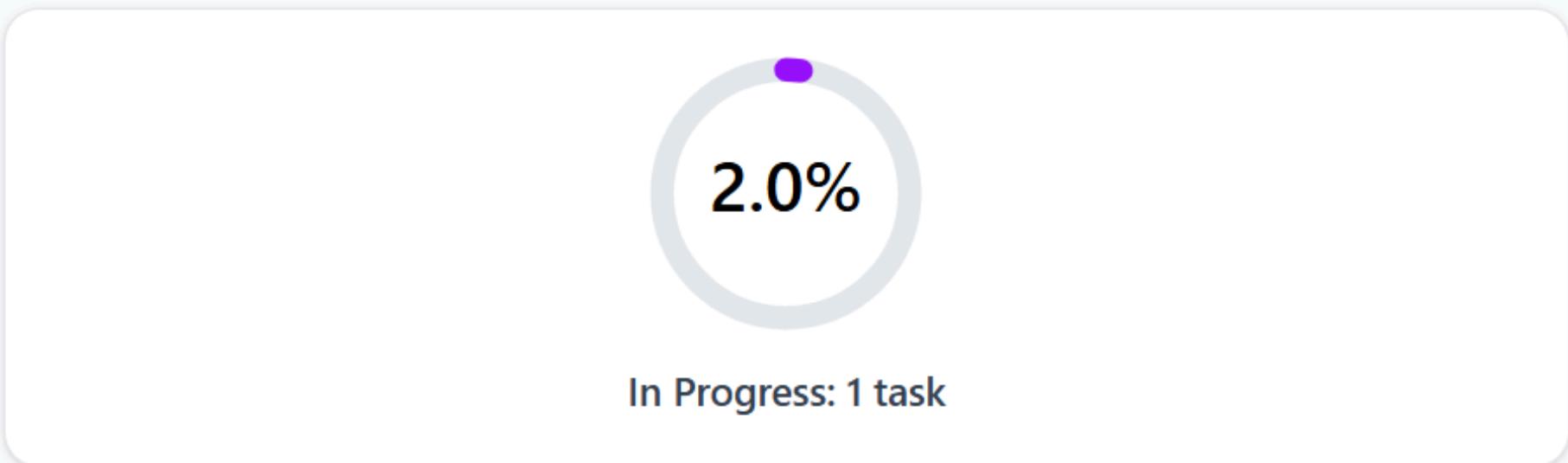
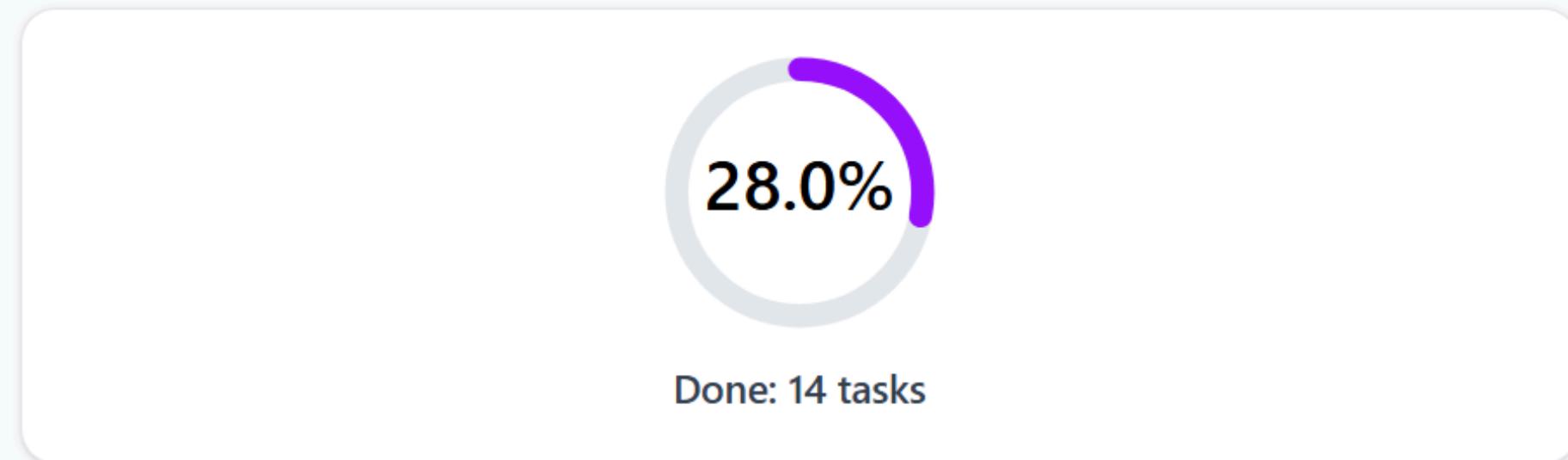
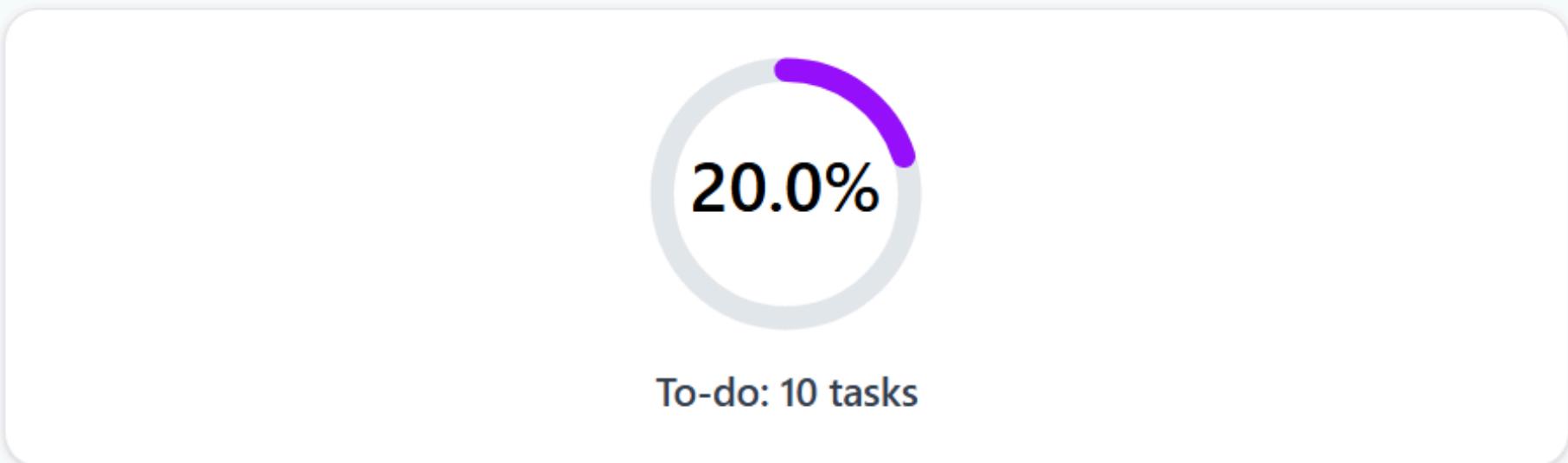
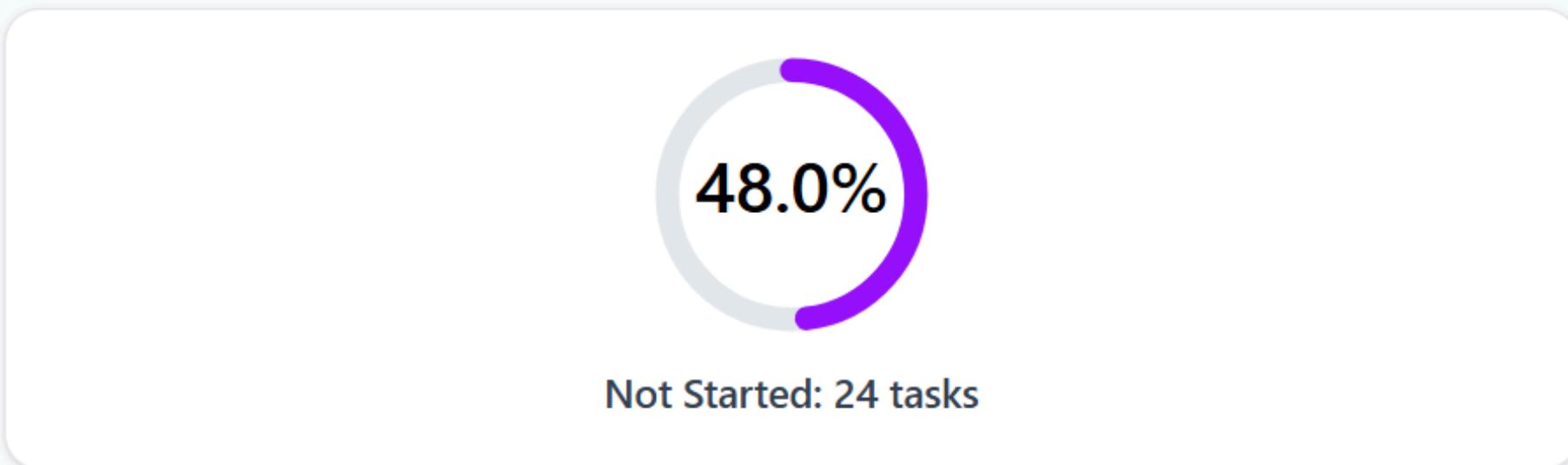
Drag & drop to change picture, or click to browse

Email: alaa.ashraf.uni@gmail.com

## Your Tasks

[+ New Task](#)

### Task Status Overview



<b>decx</b> No description available. Due Date: May 12, 2025 <span>Not Started</span>	<b>title</b> ok Due Date: May 15, 2025 <span>To-do</span>	<b>title</b> ok Due Date: May 15, 2025 <span>Done</span>
<b>title</b> ok Due Date: May 15, 2025 <span>Not Started</span>	<b>title</b> ok Due Date: May 15, 2025 <span>Not Started</span>	<b>Very Coool Task</b> No thanks Due Date: May 18, 2025 <span>To-do</span>
<b>Transcript</b> Testing the upload attachment API Due Date: May 18, 2025 <span>Not Started</span>	<b>Transcript</b> Testing the upload attachment API Due Date: May 18, 2025 <span>Not Started</span>	<b>toto</b> titi Due Date: May 18, 2025 <span>to-do</span>
<b>testop</b> op Due Date: May 18, 2025 <span>Not Started</span>	<b>Negm</b> Another negm Due Date: May 18, 2025 <span>In progress</span>	<b>io</b> jo Due Date: May 18, 2025 <span>Not Started</span>

## Create New Task

Drag & drop a file here, or click to select

Title

Enter task title

Description

Enter task description

Status

Select status

Priority

Select priority

Due Date

dd-----yyyy --:-- -

Cancel

Create Task

## Transcript

Description: Testing the upload attachment API

Due Date: May 18, 2025

Priority: Medium

Status: ● Not Started

Attachment: [stopsign.jpg \(Download\)](#)

[Back](#)[Edit Task](#)[Delete](#)

## Transcript

Description: Testing the upload attachment API

Due Date: May 18, 2025

Priority: Medium

Status: ● Not Started

Attachment: [stopsign.jpg \(Download\)](#)

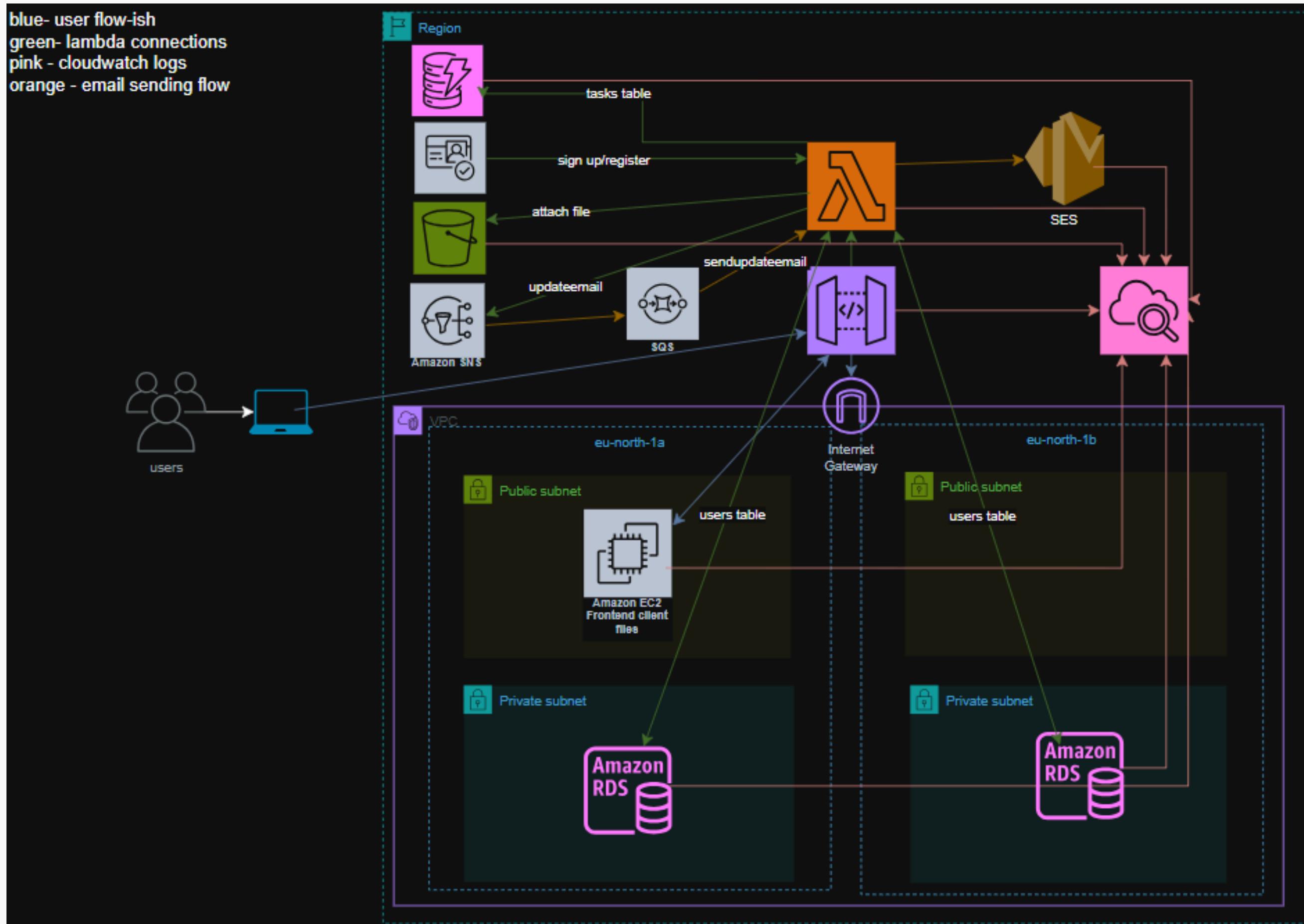
[Back](#)[Edit Task](#)[Delete](#)

## Task Calendar

		May 18 – 24, 2025					
							Month
Sun 5/18	Mon 5/19	Tue 5/20	Wed 5/21	Thu 5/22	Fri 5/23	Sat 5/24	
<ul style="list-style-type: none"><li>● 3:14p Transcript</li><li>● 4:20p Very Cool Task</li><li>● 6:14p Transcript</li><li>● 7:32p toto</li><li>● 9:52p testop</li><li>● 9:53p Negm</li><li>● 10:11p io</li><li>● 10:36p ok</li><li>● 10:50p screenshot</li><li>● 10:50p screenshot</li><li>● 10:50p screenshot</li><li>● 11p I am testing</li></ul>	<ul style="list-style-type: none"><li>● 1:35a I don't know what the he</li><li>● 6:32p transcript</li><li>● 7:16p title</li><li>● 7:31p test done</li><li>● 7:33p kk</li><li>● 7:34p x</li><li>● 9:49p jo</li><li>● 9:49p jo</li></ul>		<ul style="list-style-type: none"><li>● 1:18a are you ok</li><li>● 1:19a okok</li><li>● 10:46p I am ok</li><li>● 10:46p I am ok</li><li>● 10:48p somethign</li><li>● 10:48p somethign</li></ul>	<ul style="list-style-type: none"><li>● 9:30p hiok</li><li>● 11:08p yes</li><li>● 11:09p yes</li><li>● 11:11p YOUSIF IS THE BEST - Alaa Ashraf 2025</li><li>● 11:08p Blessed is this Website</li><li>● 11:08p Blessed is this Website</li><li>● 11:08p Blessed is this Website</li><li>● 11:08p Blessed is this Website</li></ul>			

# Architecture Diagram

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# S3 Bucket



428699245244-d7f2mtng.eu-north-1.console.aws.amazon.com/s3/buckets/task-attachements-bucket?region=eu-north-1&tab=objects&bucketType=general

Items | Amazon Dyn... All Bookmarks

aws Search [Alt+S]

Europe (Stockholm) Account ID: 4286-9924-5244 Alaa

Amazon S3 > Buckets > task-attachements-bucket

task-attachements-bucket [Info](#)

Objects Properties Permissions Metrics Management Access Points

Objects (15)

Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

Find objects by prefix

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	<a href="#">0356750c-1e53-499a-9911-20c8f3d92ebb/</a>	Folder	-	-	-
<input type="checkbox"/>	<a href="#">1/</a>	Folder	-	-	-
<input type="checkbox"/>	<a href="#">1af89853-98cb-46bc-b7dc-3dba441402e6/</a>	Folder	-	-	-
<input type="checkbox"/>	<a href="#">339e3da5-7da0-4a84-a9c4-236e18fbf28c/</a>	Folder	-	-	-
<input type="checkbox"/>	<a href="#">4d9a719d-644c-437f-9676-0bea6cfcb41/</a>	Folder	-	-	-
<input type="checkbox"/>	<a href="#">5d97bf1c-0131-483d-b304-4ae5e2e8f4d6/</a>	Folder	-	-	-

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# S3 Bucket Policy

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The screenshot shows the AWS S3 Bucket Policies page for the bucket 'task-attachments-bucket'. At the top, there is a message box stating: 'Public access is blocked because Block Public Access settings are turned on for this bucket. To determine which settings are turned on, check your Block Public Access settings for this bucket. Learn more about [using Amazon S3 Block Public Access](#)'.

The policy document itself is displayed below:

```
{  
  "Version": "2012-10-17",  
  "Statement": [  
    {  
      "Effect": "Allow",  
      "Principal": {  
        "AWS": "arn:aws:iam::428699245244:role/lambda-s3-role"  
      },  
      "Action": [  
        "s3:GetObject",  
        "s3:PutObject",  
        "s3:DeleteObject"  
      ],  
      "Resource": "arn:aws:s3:::task-attachments-bucket/*"  
    }  
  ]  
}
```

On the right side of the policy document, there is a 'Copy' button.

# S3 Bucket CORS Permission

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The screenshot shows the 'Cross-origin resource sharing (CORS)' configuration for the 'task-attachments-bucket'. The configuration is defined in JSON:

```
[  
  {  
    "AllowedHeaders": [  
      "*"  
    ],  
    "AllowedMethods": [  
      "GET",  
      "PUT"  
    ],  
    "AllowedOrigins": [  
      "http://localhost:5173",  
      "http://localhost:5174",  
      "http://localhost:5175",  
      "http://localhost:5176",  
      "https://13.53.207.206",  
      "https://13-53-207-206.nip.io"  
    ],  
    "ExposeHeaders": [  
      "ETag"  
    ]  
  }]
```

The 'Edit' button is located at the top right of the configuration panel, and a 'Copy' button is located on the far right of the JSON code area.

# DynamoDB Table



The screenshot shows the Amazon DynamoDB console interface. At the top, there is a search bar labeled "Search" and a keyboard shortcut "[Alt+S]". On the right side of the header, there are icons for account information (Account ID: 4286-9924-5244, Region: Europe (Stockholm)), and a user profile (Alaa). Below the header, a navigation bar shows the current view: "Tables". A blue banner at the top of the main content area contains two informational messages:

- ① **Share your feedback on Amazon DynamoDB**: Your feedback is an important part of helping us provide a better customer experience. Take this short survey to let us know how we're doing. [Share feedback](#) [X](#)
- ① **Amazon DynamoDB reduces prices for on-demand throughput by 50% and global tables by up to 67%**. To learn more, see [What's New post](#) and visit the [DynamoDB pricing page](#).

The main content area displays a table titled "Tables (1)". The table has one item, "Tasks", which is highlighted. The table columns include:

- 
- Name: [Tasks](#)
- Status: Active
- Partition key: task\_id (S)
- Sort key: -
- Indexes: 1
- Replication Regions: 0
- Deletion protection: Off
- Favorite: ★
- Read capacity: On-demand

Below the table, there are navigation controls for pages 1 through 10, and a gear icon for settings.

# DynamoDB Table



aws | Search [Alt+S] | Account ID: 4286-9924-5244 ▾  
Europe (Stockholm) ▾ Alaa

DynamoDB > Tables

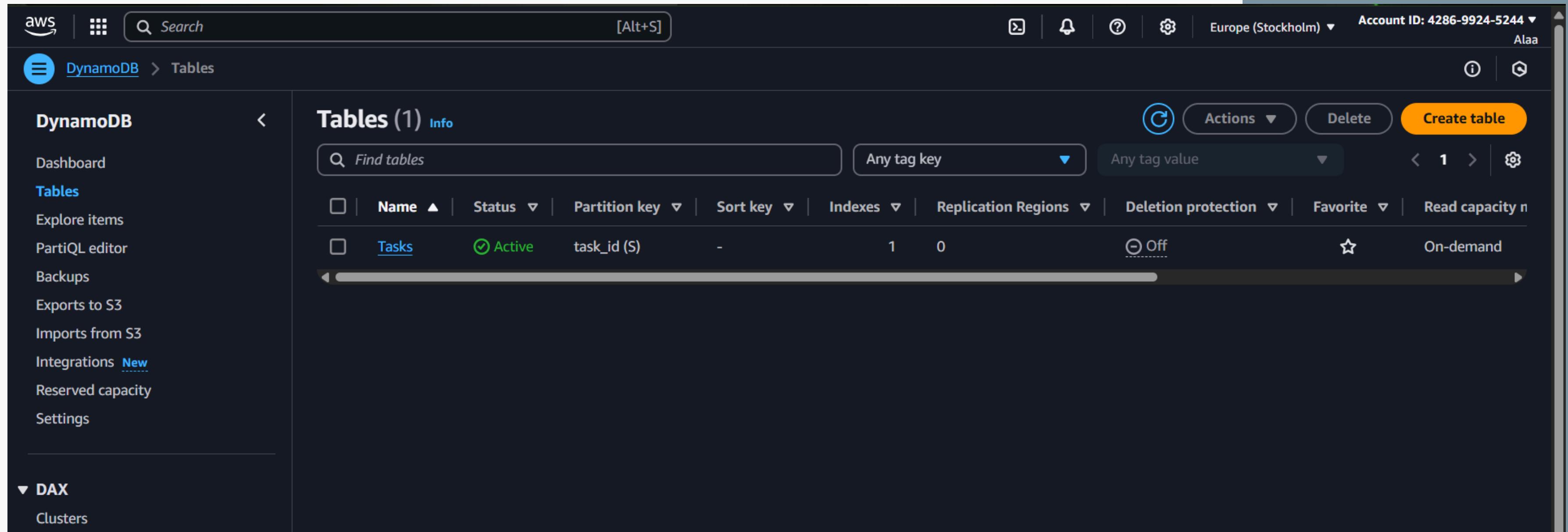
**DynamoDB** C Actions ▾ Delete Create table

Find tables Any tag key Any tag value < 1 > ⚙️

<input type="checkbox"/>	Name ▲	Status ▼	Partition key ▼	Sort key ▼	Indexes ▼	Replication Regions ▼	Deletion protection ▼	Favorite ▼	Read capacity ▼
<input type="checkbox"/>	<a href="#">Tasks</a>	<span style="color: #0070C0;">✓ Active</span>	task_id (S)	-	1	0	<span style="color: #0070C0;">⊖ Off</span>	<span style="color: #0070C0;">★</span>	On-demand

Dashboard  
**Tables**  
Explore items  
PartiQL editor  
Backups  
Exports to S3  
Imports from S3  
Integrations New  
Reserved capacity  
Settings

▼ DAX  
Clusters



# DynamoDB Table Items



Screenshot of the AWS DynamoDB console showing the 'Tasks' table items.

The left sidebar shows navigation links: Dashboard, Tables, Explore items (selected), PartiQL editor, Backups, Exports to S3, Imports from S3, Integrations (New), Reserved capacity, Settings, and DAX (Clusters, Subnet groups, Parameter groups, Events).

The main area displays the 'Table: Tasks - Items returned (50)' with a scan started on May 23, 2025, at 22:28:51. The table has columns: task\_id (String), attachmentUrl, createdAt, deadline, description, and dueD.

	task_id (String)	attachmentUrl	createdAt	deadline	description	dueD
<input type="checkbox"/>	<a href="#">d0b94c1c-7bd6-4b6a...</a>	<empty>	2025-05-1...		foesko	2025-
<input type="checkbox"/>	<a href="#">8f24f427-77a9-4a46...</a>	<empty>	2025-05-2...		Yes	2025-
<input type="checkbox"/>	<a href="#">ea652d0d-26ac-4ccf...</a>	<empty>	2025-05-2...		yees	2025-
<input type="checkbox"/>	<a href="#">78d3a770-1f7c-4e61...</a>	<empty>	2025-05-1...		asdasd	2025-
<input type="checkbox"/>	<a href="#">efd71b47-02bc-46d2...</a>	<empty>	2025-05-2...		Yes	2025-
<input type="checkbox"/>	<a href="#">7dfd6f32-5016-4d3d...</a>	<empty>		2025-05-2...	Fixed the spac...	2025-
<input type="checkbox"/>	<a href="#">fcb943cf-f518-4daa...</a>	<empty>	2025-05-1...		BOB the 3rd	2025-
<input type="checkbox"/>	<a href="#">df9f1640-a6fe-4aac...</a>	<empty>	2025-05-1...		op	2025-
<input type="checkbox"/>	<a href="#">a52f3118-0d1e-464e...</a>	<empty>	2025-05-2...		Yes	2025-
<input type="checkbox"/>	<a href="#">e9e3ae36-a022-4b26...</a>	<empty>	2025-05-1...		ok	2025-

# VPC



A screenshot of the AWS VPC dashboard. The top navigation bar shows the AWS logo, search bar, and account information (Account ID: 4286-9924-5244, Europe (Stockholm)). The left sidebar has a 'VPC dashboard' section with 'EC2 Global View' and a dropdown for 'Filter by VPC'. Below it is a 'Virtual private cloud' section with 'Your VPCs' and 'Subnets'. The main content area is titled 'Your VPCs (1) Info' and displays a single VPC entry:

Name	VPC ID	State	Block Public...	IPv4 CIDR	IPv6 CIDR
task-management-vpc	vpc-0f24db5210d90de46	Available	Off	10.0.0.0/16	-

The table includes column headers: Name, VPC ID, State, Block Public..., IPv4 CIDR, and IPv6 CIDR. The 'Actions' button is located at the top right of the table, and a 'Create VPC' button is also present.

# VPC Details



Screenshot of the AWS VPC Details page for the VPC `vpc-0f24db5210d90de46 / task-management-vpc`.

**Details**

<b>VPC ID</b> <code>vpc-0f24db5210d90de46</code>	<b>State</b> Available	<b>Block Public Access</b> Off	<b>DNS hostnames</b> Enabled
<b>DNS resolution</b> Enabled	<b>Tenancy</b> default	<b>DHCP option set</b> <code>dopt-0656bca9292ff6f9c</code>	<b>Main route table</b> <code>rtb-0fe219c30f4b2deff</code>
<b>Main network ACL</b> <code>acl-041f3104cabf22cbe</code>	<b>Default VPC</b> No	<b>IPv4 CIDR</b> <code>10.0.0.0/16</code>	<b>IPv6 pool</b> -
<b>IPv6 CIDR (Network border group)</b> -	<b>Network Address Usage metrics</b> Disabled	<b>Route 53 Resolver DNS Firewall rule groups</b> -	<b>Owner ID</b> <code>428699245244</code>

**Resource map**

```
graph LR; VPC[task-management-vpc] --- Subnets4[Subnets (4)]; Subnets4 --- euNorth1a[eu-north-1a]; Subnets4 --- euNorth1b[eu-north-1b]; Subnets4 --- RouteTables5[Route tables (5)]; Subnets4 --- NetworkConnections3[Network connections (3)]; euNorth1a --- subnetPublic1[task-management-subnet-public1...]; euNorth1a --- subnetPrivate1[task-management-subnet-private...]; euNorth1b --- subnetPublic2[task-management-subnet-public2...]; euNorth1b --- subnetPrivate2[task-management-subnet-private...]; RouteTables5 --- rtbPublic[task-management-rtb-public]; RouteTables5 --- rtbPrivate2[task-management-rtb-private2-eu-no...]; RouteTables5 --- dynamoRoute[dynamo-route]; RouteTables5 --- rtbMain[rtb-0fe219c30f4b2deff]; RouteTables5 --- rtbPrivate1[task-management-rtb-private1-eu-no...]; NetworkConnections3 --- igw[task-management-igw]; NetworkConnections3 --- vpceS3[task-management-vpce-s3]; NetworkConnections3 --- dynamodb[dynamodb]
```

**VPC** [Show details](#)  
Your AWS virtual network  
`task-management-vpc`

**Subnets (4)**  
Subnets within this VPC

- `eu-north-1a`
  - `task-management-subnet-public1...`
  - `task-management-subnet-private...`
- `eu-north-1b`
  - `task-management-subnet-public2...`
  - `task-management-subnet-private...`

**Route tables (5)**  
Route network traffic to resources

- `task-management-rtb-public`
- `task-management-rtb-private2-eu-no...`
- `dynamo-route`
- `rtb-0fe219c30f4b2deff`
- `task-management-rtb-private1-eu-no...`

**Network connections (3)**  
Connections to other networks

- `task-management-igw`
- `task-management-vpce-s3`
- `dynamodb`

# VPC Subnets



aws | [Alt+S] | Search | Europe (Stockholm) | Account ID: 4286-9924-5244 | Alaa

VPC > Subnets

VPC dashboard <

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Subnets (4) Info

Last updated 2 minutes ago

Actions | Create subnet

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
task-management-subnet-private1-eu...	<a href="#">subnet-0e2f88ff0e2d0cc6c</a>	Available	<a href="#">vpc-0f24db5210d90de46</a>   task...	Off	10.0.128.0/20
task-management-subnet-public2-eu-n...	<a href="#">subnet-019b238d40fc00fb</a>	Available	<a href="#">vpc-0f24db5210d90de46</a>   task...	Off	10.0.16.0/20
task-management-subnet-public1-eu-n...	<a href="#">subnet-0c04b6c7d5cd984f7</a>	Available	<a href="#">vpc-0f24db5210d90de46</a>   task...	Off	10.0.0.0/20
task-management-subnet-private2-eu...	<a href="#">subnet-0bdf3999dd3d4e3d3</a>	Available	<a href="#">vpc-0f24db5210d90de46</a>   task...	Off	10.0.144.0/20

# VPC Route Tables



Route tables (5) [Info](#)

Last updated 3 minutes ago [C](#) [Actions](#) [Create route table](#)

< 1 > | [⚙️](#)

<input type="checkbox"/>	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
<input type="checkbox"/>	task-management-rtb-public	<a href="#">rtb-0855fa45aae75f6d9</a>	2 subnets	-	No	<a href="#">vpc-0f24db5210d90de46</a>
<input type="checkbox"/>	task-management-rtb-private2-eu-nort...	<a href="#">rtb-0b78b77ff0c88385e</a>	<a href="#">subnet-0bdf3999dd3d4e...</a>	-	No	<a href="#">vpc-0f24db5210d90de46</a>
<input type="checkbox"/>	dynamo-route	<a href="#">rtb-0603b910b4fcf1f21</a>	-	-	No	<a href="#">vpc-0f24db5210d90de46</a>
<input type="checkbox"/>	-	<a href="#">rtb-0fe219c30f4b2deff</a>	-	-	Yes	<a href="#">vpc-0f24db5210d90de46</a>
<input type="checkbox"/>	task-management-rtb-private1-eu-nort...	<a href="#">rtb-0bab8f11b00e524b9</a>	<a href="#">subnet-0e2f88ff0e2d0cc...</a>	-	No	<a href="#">vpc-0f24db5210d90de46</a>

# Internet Gateway

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The screenshot shows the AWS VPC Internet Gateways page. The top navigation bar includes the user name 'Alaa' and standard navigation icons. On the left, there's a sidebar with 'VPC dashboard', 'EC2 Global View', a 'Filter by VPC' dropdown set to 'task-management', and sections for 'Virtual private cloud' and 'Your VPCs'. The main content area has a title 'Internet gateways (1) Info' and a search bar. A table lists one internet gateway:

Name	Internet gateway ID	State	VPC ID	Owner
task-management-igw	<a href="#">igw-03cd58ce27a52b335</a>	Attached	<a href="#">vpc-0f24db5210d90de46   task-manag...</a>	428699245244

On the right side of the table, there are 'Actions' and 'Create internet gateway' buttons, along with pagination controls (page 1 of 1).

# AWS Cognito



Screenshot of the AWS Cognito console showing the User Pools section.

The navigation path is: Amazon Cognito > User pools > spacetaskmanager90128fc2\_userpool\_90128fc2-dev > Users.

The main view displays the "Users" list with the following details:

User name	Email address	Email verified	Confirmation status	Status
507c396c-60c1-709c-db4...	yousefnegm@gmail.com	Yes	Confirmed	Enabled
709c39cc-3021-7070-04b...	abdelrahman.tony.5@gm...	Yes	Confirmed	Enabled
901ca90c-7051-7093-254...	sarah.elfeel@gmail.com	Yes	Confirmed	Enabled
903cb99c-7031-7053-0c2...	YousifBJaberi@gmail.com	No	Confirmed	Enabled
90fcc9ec-5041-705c-6cec...	alaa.ashraf.helmy@gmail....	No	Confirmed	Enabled
a0bc999c-d041-703f-f78...	alaa.ashraf.uni@gmail.com	No	Confirmed	Enabled

Below the table, there is an "Import users (0)" section with "Start" and "Stop" buttons and a "Create import job" button.

# Post Confirmation Lambda Trigger

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The screenshot shows the Amazon Cognito console interface. The top navigation bar includes the AWS logo, search bar, and account information (Account ID: 4286-9924-5244, Region: Europe (Stockholm)). The left sidebar shows the current user pool: spacetaskmanager90128fc2... (View all). The main content area is titled "Extensions" and displays "Lambda triggers (1)". A single trigger, "Post confirmation Lambda trigger", is listed under the "Attached Lambda function" column, which is "signup".

Amazon Cognito

Current user pool View all  
spacetaskmanager90128...

Overview

Applications

User management

Extensions

Lambda triggers (1)

Add Lambda trigger

Lambda triggers	Attached Lambda function	Trigger event version
Post confirmation Lambda trigger	signup	-

# IAM User Groups



Screenshot of the AWS IAM User Groups page.

Header:

- aws | ☰
- Search [Alt+S]
- [Alt+S]
- Global ▾
- Account ID: 4286-9924-5244
- Alaa

Breadcrumbs: IAM > User groups

Left sidebar:

- Identity and Access Management (IAM) <
- Search IAM
- Dashboard
- Access management ▾
  - User groups
  - Users
  - Roles
  - Policies
  - Identity providers

Main content:

## User groups (1) Info

A user group is a collection of IAM users. Use groups to specify permissions for a collection of users.

<input type="checkbox"/>	Group name	<input type="checkbox"/>	Users	<input type="checkbox"/>	Permissions	<input type="checkbox"/>	Creation time
<input type="checkbox"/>	<a href="#">Admin</a>	<input type="checkbox"/>	4	<input checked="" type="checkbox"/> Defined			14 days ago

Buttons: [C](#) Delete [Create group](#)

# IAM Users



Screenshot of the AWS IAM Users page.

Header:

- AWS logo
- Search bar: Search [Alt+S]
- Global navigation: Account ID: 4286-9924-5244 ▾
- User: Alaa

Breadcrumbs: IAM > Users

Left sidebar: Identity and Access Management (IAM)

- Search IAM
- Dashboard
- Access management
  - User groups
  - Users (selected)
  - Roles
  - Policies
  - Identity providers
  - Account settings
  - Root access management New
- Access reports

Main content: Users (5) Info

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

<input type="checkbox"/>	User name	Path	Groups	Last activity	MFA	Password age	Console last sign-in	A
<input type="checkbox"/>	Alaa	/	1	1 hour ago	-	14 days	May 23, 2025, 21:14 ...	-
<input type="checkbox"/>	amplify-dev	/	0	11 days ago	-	-	-	A
<input type="checkbox"/>	Bob	/	1	2 days ago	-	14 days	May 21, 2025, 16:06 ...	-
<input type="checkbox"/>	Negm	/	1	2 days ago	-	14 days	May 21, 2025, 20:58 ...	-
<input type="checkbox"/>	Roaa	/	1	23 hours ago	-	14 days	May 22, 2025, 23:02 ...	-

Actions: C Delete Create user

# IAM Roles



Screenshot of the AWS IAM Roles page showing a list of 22 roles.

The page includes a search bar, a toolbar with 'Delete' and 'Create role' buttons, and a navigation bar with account ID and user information.

The left sidebar shows the IAM navigation menu with 'Roles' selected.

The main content area displays a table of roles:

Role name	Trusted entities	Last activity
<a href="#">amplify-spacetaskmanager-dev-b441d-authRole</a>	Identity Provider: cognito-identity.ai	-
<a href="#">amplify-spacetaskmanager-dev-b441d-unauthRole</a>	Identity Provider: cognito-identity.ai	-
<a href="#">AWSServiceRoleForAPIGateway</a>	AWS Service: ops.apigateway (Service-Linked)	-
<a href="#">AWSServiceRoleForTrustedAdvisor</a>	AWS Service: trustedadvisor (Service-Linked)	-
<a href="#">rds-monitoring-role</a>	AWS Service: monitoring.rds	-
<a href="#">rds-proxy-role-1747344805539</a>	AWS Service: rds	-
<a href="#">upClientLambdaRole90128fc2b441d-dev</a>	AWS Service: lambda	-
<a href="#">amplify-spacetaskmanager-dev-b441d-authRole-idp</a>	AWS Service: lambda	11 days ago
<a href="#">AWSServiceRoleForSupport</a>	AWS Service: support (Service-Linked)	8 days ago
<a href="#">rds-proxy-role-1747344851684</a>	AWS Service: rds	6 days ago
<a href="#">deleteTask-role-twmhfz2z</a>	AWS Service: lambda	5 days ago
<a href="#">fetch-user-data-role-117on9al</a>	AWS Service: lambda	3 days ago
<a href="#">signup-role-0n6wbxyt</a>	AWS Service: lambda	23 hours ago
<a href="#">lambda-dynamo-role</a>	AWS Service: lambda	23 hours ago
<a href="#">lambda-s3-role</a>	AWS Service: lambda	23 hours ago
<a href="#">getTask-role-Oznkttmt</a>	AWS Service: lambda	23 hours ago
<a href="#">updateTask-role-5qw2nxl2</a>	AWS Service: lambda	23 hours ago
<a href="#">getTasks-role-zoomvoyi</a>	AWS Service: lambda	22 hours ago
<a href="#">AWSServiceRoleForPAM</a>	AWS Service: ipam (Service-Linked Role)	20 minutes ago
<a href="#">sendTaskUpdateEmail-role-98zjs0sv</a>	AWS Service: lambda	15 minutes ago

# EC<sub>2</sub>



The screenshot shows the AWS EC2 Instances page. The top navigation bar includes the AWS logo, search bar, account information (Account ID: 4286-9924-5244, Region: Europe (Stockholm)), and various navigation icons. The left sidebar has a dark theme with sections for EC2 (selected), Dashboard, EC2 Global View, Events, Instances (selected), Instances Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, and Capacity Reservations. Below Instances, there are sections for Images (AMIs, AMI Catalog) and Elastic Block Store (Volumes, Snapshots). The main content area displays 'Instances (1/1)' with a single instance listed: task\_manage... (Instance ID: i-0f421ddce645e219a), which is Running, t3.micro, and has 3/3 checks passed. The instance summary shows details like Public IPv4 address (13.53.207.206), Private IPv4 address (10.0.9.89), Public DNS (ec2-13-53-207-206.eu-north-1.compute.amazonaws.com), and Hostname type (IP name: ip-10-0-9-89.eu-north-1.compute.internal). The bottom footer includes CloudShell, Feedback, and links to Privacy, Terms, and Cookie preferences.

# EC2 Alarm



aws | Search [Alt+S] | Account ID: 4286-9924-5244 ▾ Alaa | Europe (Stockholm) ▾

EC2 Instances i-0f421ddce645e219a

EC2 Dashboard EC2 Global View Events Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots

Required Operator

arn:aws:ec2:eu-north-1:428699245244:instance/i-0f421ddce645e219a false

Details Status and alarms Monitoring Security Networking Storage Tags

Status checks Info Actions ▾

Status checks detect problems that may impair i-0f421ddce645e219a (task\_management\_web\_server) from running your applications.

System status checks  System reachability check passed

Instance status checks  Instance reachability check passed

Attached EBS status checks  Attached EBS reachability check passed

Metrics

Alarms

Find alarms by name

Name	State	Description	Metric name	State reason
awsec2-i-0f421...	<input checked="" type="checkbox"/> OK	Alarm on instance i-0f...	CPUUtilization	-

# EC2 I/O Rules



aws | Search [Alt+S] | Europe (Stockholm) ▾ Account ID: 4286-9924-5244 ▾ Alaa

EC2 > Instances > i-0f421ddce645e219a

EC2

Dashboard

EC2 Global View

Events

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Inbound rules

Filter rules

Name Security group rule ID Port range Protocol Source Security group

-	sgr-02c6eee85aefe3d15	80	TCP	0.0.0.0/0	launch-wizard-
-	sgr-017656b92d07053be	5173	TCP	0.0.0.0/0	launch-wizard-
-	sgr-03e24b027eecf8440	22	TCP	0.0.0.0/0	launch-wizard-
-	sgr-06231afc9b951f479	443	TCP	0.0.0.0/0	launch-wizard-

Outbound rules

Filter rules

Name Security group rule ID Port range Protocol Destination Security group

-	sgr-081adc4eb887fb64	5432	TCP	sg-048c4da83ef3ca871	ec2-rds-1
-	sgr-05dbb29a35c566691	All	All	0.0.0.0/0	launch-wizard-

# EC2 Metrics



aws | Search [Alt+S] | EC2 Instances i-0f421ddce645e219a | Europe (Stockholm) | Account ID: 4286-9924-5244 | Alaa

Include metrics in the CWAgent namespace [Learn more](#) | [Configure CloudWatch agent](#) | [Manage detailed monitoring](#)

Alarm recommendations [Investigate with AI - new](#) | 3h 1d 1w UTC timezone [Explore related](#) :

**EC2** |

- Dashboard
- EC2 Global View
- Events
- Instances**
  - Instances
  - Instance Types
  - Launch Templates
  - Spot Requests
  - Savings Plans
  - Reserved Instances
  - Dedicated Hosts
  - Capacity Reservations
- Images**
  - AMIs
  - AMI Catalog
- Elastic Block Store**
  - Volumes
  - Snapshots

**Metrics**

**CPU utilization (%)** | Percent | 05/16 | 05/23 |

**Network in (bytes)** | Bytes | 05/16 | 05/23 |

**Network out (bytes)** | Bytes | 05/16 | 05/23 |

**Network packets in (count)** | Count | 05/16 | 05/23 |

**Network packets out (count)** | Count | 05/16 | 05/23 |

**Metadata no token (count)** | No unit | 05/16 | 05/23 |

**CPU credit usage (count)** | Count | 05/16 | 05/23 |

**CPU credit balance (count)** | Count | 05/16 | 05/23 |

# SNS Topics



aws |  [Alt+S] | | Europe (Stockholm) ▾ Account ID: 4286-9924-5244 ▾ Alaa

[Amazon SNS](#) > [Topics](#)

**Amazon SNS** <

[Dashboard](#)

**Topics**

[Subscriptions](#)

**Mobile**

[Push notifications](#)

[Text messaging \(SMS\)](#)

## Topics (2)

**Edit** **Delete** **Publish message** **Create topic**

	Name	Type	ARN
	<a href="#">Default_CloudWatch_Alarms_Topic</a>	Standard	arn:aws:sns:eu-north-1:428699245244:Default_Clo...
	<a href="#">TaskNotificationTopic</a>	Standard	arn:aws:sns:eu-north-1:428699245244:TaskNotifica...

# SQS Queues



AWS | Search [Alt+S] | Europe (Stockholm) ▾ Account ID: 4286-9924-5244 ▾ Alaa

Amazon SQS > Queues

Queues (2)

Search queues by prefix

C Edit Delete Send and receive messages Actions ▾ Create queue

< 1 > | 🔍

Name	Type	Created	Messages available	Messages in flight	Encryption	Content-based deduplication
TaskNotificationDLQ	Standard	2025-05-09T16:52+03:00	0	0	Amazon SQS key (SSE-SQS)	-
TaskNotificationQueue	Standard	2025-05-09T16:53+03:00	0	0	Amazon SQS key (SSE-SQS)	-

# SQS Queues → SNS Subscription

• • • •

The screenshot shows the AWS SQS Queue configuration page for the queue `TaskNotificationQueue`. The queue is set to **Standard** type. It has an **Encryption** key (Amazon SQS key (SSE-SQS)). The **URL** is `https://sq.eu-north-1.amazonaws.com/428699245244/TaskNotificationQueue`. A **Dead-letter queue** is enabled, pointing to the same queue ARN. A **More** link is visible.

The navigation bar below the queue details includes tabs for **SNS subscriptions**, **Lambda triggers**, **EventBridge Pipes**, **Dead-letter queue**, **Monitoring**, **Tagging**, **Queue policies**, **Encryption**, and **Dead-letter queue redri**.

The **SNS subscriptions** tab is selected, showing one subscription in the **Subscription region** `eu-north-1`. The subscription details are as follows:

Subscription ARN	Topic ARN
<code>arn:aws:sns:eu-north-1:428699245244:TaskNotificationTopic</code>	<code>arn:aws:sns:eu-north-1:428699245244:TaskNotificationTopic</code>

Actions available for the subscription include **View in SNS**, **Delete**, and **Subscribe to Amazon SNS topic**.

# SQS Queues → Lambda Trigger

• • • •

The screenshot shows the AWS SQS Queue Details page for a queue named "TaskNotificationQueue". The "Lambda triggers" tab is selected. A single Lambda trigger is listed, pointing to the function "sendTaskUpdateEmail".

**Details** Info

<b>Name</b> TaskNotificationQueue	<b>Type</b> Standard	<b>ARN</b> arn:aws:sqs:eu-north-1:428699245244:TaskNotificationQueue
<b>Encryption</b> Amazon SQS key (SSE-SQS)	<b>URL</b> https:// <a href="https://sq.eu-north-1.amazonaws.com/428699245244/TaskNotificationQueue">sq.eu-north-1.amazonaws.com/428699245244/TaskNotificationQueue</a>	<b>Dead-letter queue</b> Enabled

▶ More

SNS subscriptions | **Lambda triggers** | EventBridge Pipes | Dead-letter queue | Monitoring | Tagging | Queue policies | Encryption | Dead-letter queue redri

**Lambda triggers (1) Info**

UUID	ARN	Status	Last modified
0b562fa1-2c73-4716-971d-69c4e86d704f	arn:aws:lambda:eu-north-1:428699245244:function:sendTaskUpdateEmail	Enabled	5/12/2025, 9:14:30 PM

**View in Lambda** Configure Lambda function trigger

# SES



Amazon SES > Configuration: Identities

Amazon SES

Get set up

Account dashboard

Reputation metrics

SMTP settings

What's new [New](#)

Configuration

Identities

Configuration sets

Dedicated IPs

Global endpoints

Email templates

Suppression list

Cross-account notifications

## Identities

The **Identities** pane lists your domains, subdomains, and email address identities. All identities must be verified before you use them to send email in Amazon SES. [Learn more](#). The **Recommendations** pane lists high-impact email authentication issues found for the identities you select and check for recommendations. [Learn more](#)

Identities (4) [Info](#) Last updated 1 minute ago Check for recommendations Send test email Delete Create identity

Search all identities

Identity	Identity type	Identity status
<a href="#">taskmanagement.com</a>	Domain	Unverified
<a href="#">roaaradwan9@gmail.com</a>	Email address	Verified
<a href="#">yousefnegm@gmail.com</a>	Email address	Verified
<a href="#">alaa.ashraf.uni@gmail.com</a>	Email address	Verified

# API Gateway



AWS | Search [Alt+S] | Account ID: 4286-9924-5244 | Europe (Stockholm) | Alaa

API Gateway > APIs > task-management-api-gateway (mye64ogig2) > Authorization

API Gateway

APIs

Custom domain names

Domain name access associations

VPC links

API: task-management... (mye64ogig2)

Develop

Routes

Authorization

Integrations

CORS

Reimport

Export

Deploy

Stages

Choose a route.

### Routes for task-management-api-gateway

Method	Path	Auth
DELETE	/get-task-attachment	JWT Auth
GET	/task/{id}	JWT Auth
POST	/task	JWT Auth
PUT	/attachments	JWT Auth
PATCH	/attachments	JWT Auth
DELETE	/attachments	JWT Auth
GET	/tasks	JWT Auth

# API Gateway Deploy Stage

• • • •

The screenshot shows the AWS API Gateway Stages page for the 'task-management-api-gateway (mye64ogig2)' API. The left sidebar includes sections for Custom domain names, Domain name access associations, VPC links, API details (API: task-management... (mye64ogig2)), Develop (Routes, Authorization, Integrations, CORS, Reimport, Export), Deploy (Stages), and Monitor (Metrics, Logging). The main content area shows the 'Stages' section for the selected API. It displays a list of stages: \$default, stage-cors (selected), and task-management-deploy-stage. A search bar is present. To the right, the 'Stage details' for 'stage-cors' are shown, including:

Details	Value
Name	stage-cors
Created	May 12, 2025 1:53 PM
Last updated	May 18, 2025 3:23 PM
Invoke URL	<a href="https://mye64ogig2.execute-api.eu-north-1.amazonaws.com/stage-cors">https://mye64ogig2.execute-api.eu-north-1.amazonaws.com/stage-cors</a>
Description	None
Attached deployment	Automatic Deployment Disabled
Deployment ID	4z7bd5
Deployment created	May 18, 2025 3:23 PM
Deployment description	Created by AWS Lambda

Buttons for Stage selection ('Stage: stage-cors'), Deploy, Delete, and Edit are also visible.

# Lambdas



aws | [Alt+S] | Search | Europe (Stockholm) | Account ID: 4286-9924-5244 | Alaa

**Lambda** > Functions

**Functions (12)**

Last fetched 20 seconds ago [Actions](#) [Create function](#)

<input type="checkbox"/> Function name	Description	Package type	Runtime	Last modified
<a href="#">deleteTask</a>	-	Zip	Node.js 22.x	5 days ago
<a href="#">get-task-attachement</a>	An Amazon S3 trigger that retrieves metadata for the object that has been updated.	Zip	Node.js 18.x	2 weeks ago
<a href="#">getTask</a>	-	Zip	Node.js 18.x	1 week ago
<a href="#">sendTaskUpdateEmail</a>	-	Zip	Node.js 22.x	5 days ago
<a href="#">fetch-user-data</a>	A starter AWS Lambda function.	Zip	Node.js 18.x	3 days ago
<a href="#">signup</a>	-	Zip	Node.js 22.x	4 days ago
<a href="#">upload-task-attachment</a>	An Amazon S3 trigger that retrieves metadata for the object that has been updated.	Zip	Node.js 18.x	6 days ago
<a href="#">create-task</a>	A starter AWS Lambda function.	Zip	Node.js 18.x	5 days ago
<a href="#">amplify-spacetaskmanager--UpdateRolesWithIDPFuncti-HLe9peSwZalZ</a>	-	Zip	Node.js 22.x	2 weeks ago
<a href="#">delete-task-attachment</a>	An Amazon S3 trigger that retrieves metadata for the object that has been updated.	Zip	Node.js 18.x	2 weeks ago
<a href="#">updateTask</a>	-	Zip	Node.js 22.x	5 days ago
<a href="#">getTasks</a>	-	Zip	Node.js 22.x	6 days ago

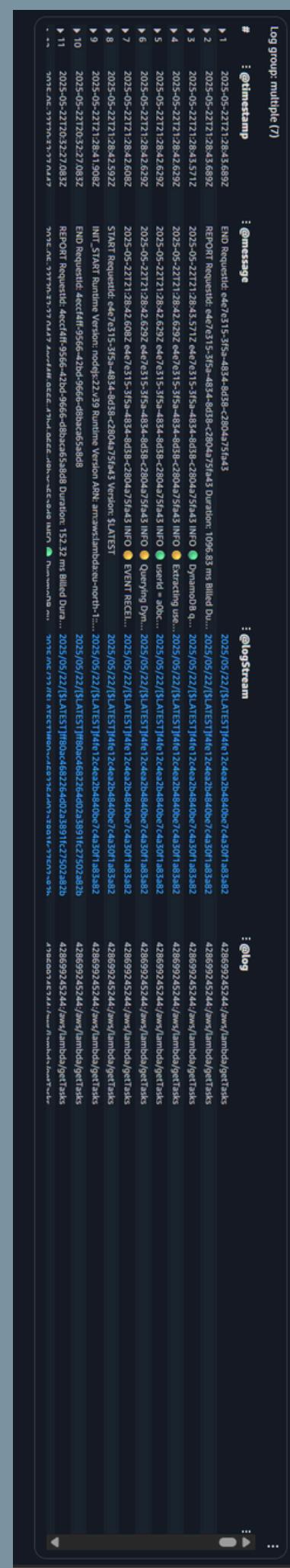
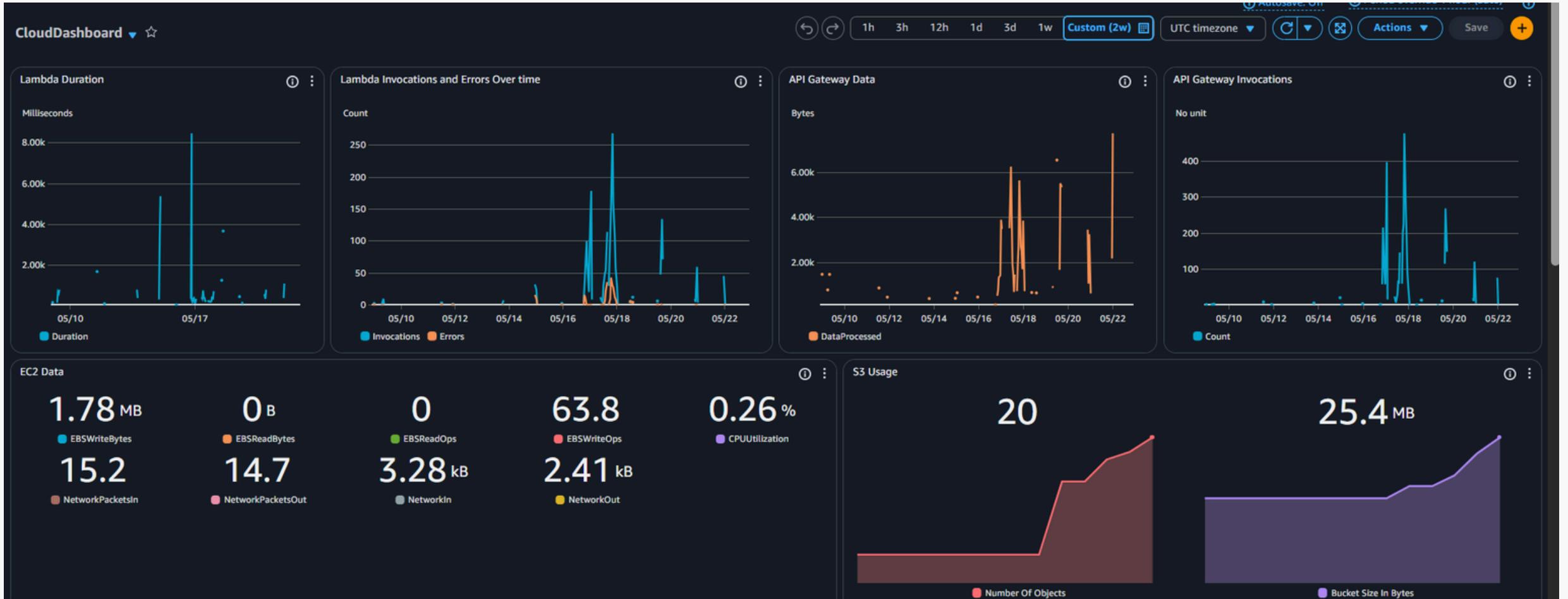
# *Cloudwatch Alarms*



The screenshot shows the AWS CloudWatch Alarms page. The left sidebar has a 'CloudWatch' header and sections for Dashboards, AI Operations (Preview), Alarms (with 1 OK, 5 insufficient), All alarms, Logs (Log groups, Log Anomalies), Metrics (Live Tail, Logs Insights, Contributor Insights), and Metrics. The main area is titled 'Alarms (6)' and includes filters for Hide Auto Scaling alarms, Clear selection, Create composite alarm, Actions, and Create alarm. A search bar is also present. The table lists six alarms:

	Name	State	Last state update (UTC)	Conditions	Actions
<input type="checkbox"/>	<a href="#">awsec2-i-0f421ddce645e219a-GreaterThanOrEqualToThreshold-CPUUtilization</a>	<span>OK</span>	2025-05-23 19:42:31	CPUUtilization >= 0.5 for 1 datapoints within 5 minutes	<span>Actions enabled</span>
<input type="checkbox"/>	<a href="#">APIGatewayLatencyIncrease</a>	<span>Insufficient data</span>	2025-05-22 21:53:38	Latency > 1000 for 1 datapoints within 5 minutes	<span>Actions enabled</span>
<input type="checkbox"/>	<a href="#">SNSFailedNotifications</a>	<span>Insufficient data</span>	2025-05-22 21:45:10	NumberOfNotificationsFailed > 0 for 1 datapoints within 5 minutes	<span>Actions enabled</span>
<input type="checkbox"/>	<a href="#">LambdaErrorDetection</a>	<span>Insufficient data</span>	2025-05-22 21:44:59	Errors > 0 for 1 datapoints within 5 minutes	<span>Actions enabled</span>
<input type="checkbox"/>	<a href="#">LambdaDuration</a>	<span>Insufficient data</span>	2025-05-22 21:44:22	Duration > 2000 for 1 datapoints within 5 minutes	<span>Actions enabled</span>
<input type="checkbox"/>	<a href="#">AWS/EC2 CPUUtilization InstanceId=i-03f6ce4d4f466171f</a>	<span>Insufficient data</span>	2025-05-20 13:15:36	CPUUtilization > 80 for 3 datapoints within 15 minutes	<span>Actions enabled</span>

# *Cloudwatch Dashboard*



# Space Task Manager User Manual



Welcome to the **Space Task Manager!** This guide will help you navigate and use the key features of the site to manage your tasks efficiently.

## Table of Contents

- [1. Getting Started](#)
  - [1.1 Sign Up](#)
  - [1.2 Log In](#)
- [2. Home Page](#)
- [3. Task List](#)
  - [3.1 Grid View](#)
  - [3.2 Calendar View](#)
- [4. Creating a New Task](#)
- [5. Task Details](#)
  - [5.1 Viewing Details](#)
  - [5.2 Editing a Task](#)
  - [5.3 Deleting a Task](#)
  - [5.4 File Attachments](#)
- [6. Account Management](#)
- [7. FAQ](#)
- [8. Support](#)

## 1. Getting Started



To begin using Space Task Manager, navigate to the website and either [sign up](#) for a new account or [log in](#) to your existing account.

### 1.1 Sign Up

1. Click on [Sign Up](#) in the top navigation.
2. Fill in your details:
  - o [Email Address](#)
  - o [Password](#) (and confirm)
3. Click [Create Account](#).
4. You will be redirected to the Home Page upon successful registration.

### 1.2 Log In

1. Click on [Log In](#) in the top navigation.
2. Enter your [Email Address](#) and [Password](#).
3. Click [Log In](#).
4. If credentials are valid, you will be taken to the Home Page.

## 2. Home Page

The Home Page provides an overview of your tasks and quick access to key actions.

- **Navigation Bar:** Links to Home, My Tasks, Calendar.
- **My Tasks:** A button to view the list of tasks you have

### 3. Task List

Navigate to [My Tasks](#) to view all your tasks in one place.



- Use the [View Mode](#) toggle in the top-right to switch between [Grid View](#) and [Calendar View](#).

#### 3.1 Grid View

- Displays tasks as cards in a grid layout.
- Each card shows:
  - Title
  - Due Date
  - Priority
  - Status
- Click a card to open its detailed view.

#### 3.2 Calendar View

- Opens the [Calendar](#) page.
- Tasks are shown on their respective due dates.
- Click a date to see tasks due on that day.

### 4. Creating a New Task

1. On the grid view of tasks, click [New Task](#).
2. Fill in the task form:
  - [Title](#) (required)
  - [Description](#)
  - [Priority](#) (e.g., Low, Medium, High)
  - [Status](#) (e.g., To Do, In Progress, Done, Cancelled)
  - [Due Date](#)
  - [Attachment](#) (optional): Upload a file if needed.
3. Click [Save](#) to create the task.

### 3. Task List

Navigate to [My Tasks](#) to view all your tasks in one place.



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  - [Status](#) (e.g., To Do, In Progress, Done, Cancelled)
  - [Due Date](#)
  - [Attachment](#) (optional): Upload a file if needed.
3. Click [Save](#) to create the task.

## 5. Task Details



Click a task (from grid or calendar) to open its detail page.

### 5.1 Viewing Details

- **Header:** Displays Title, Priority, Status, and Due Date.
- **Description:** Full description text.
- **Attachment:** Link/button to download any attached file.

### 5.2 Editing a Task

1. On the task detail page, click **Edit**.
2. Update any fields in the form.
3. Click **Save** to apply changes.

### 5.3 Deleting a Task

1. On the task detail page, click **Delete**.
2. Confirm the deletion in the pop-up dialog.
3. Task will be permanently removed.

### 5.4 File Attachments

- When creating or editing a task, use the **Attachment** drop-box to upload a file.
- On the task detail page, click **Download** to retrieve the file.

Thank you for choosing **Space Task Manager** to organize your tasks!



- AWS Steps:

- Alaa

- Created the S3 bucket so that attachments can be uploaded/downloaded.
    - Created the Lambda that generates a presigned URL given the task ID and the file name to allow the frontend to access the S3 task attachment directly, as well as the Lambda that generates a presigned URL to allow the frontend to directly upload the task attachment to the `bucket/taskId/filename`.
    - Created the API Gateway and linked the Lambdas to them.
    - Ensured CORS works for the Lambdas. Dealt with cross-origin blocking permissions on the S3 to allow the server to upload attachments directly with the presigned URL.
    - Connected to the EC2 server. Cloned the frontend repo and deployed the application. Used `tmux` to run the application in the background so the deployment remains up when EC2 connect is closed.
    - Connected the frontend with multiple Lambdas like the attachment Lambdas and the edit/delete task Lambdas.
    - Tested the APIs online first with ReqBin to ensure the API Gateway is calling the Lambdas before integrating with the frontend.
    - In the frontend, created the calendar view where tasks are shown by date for better visualization.
    - In the grid view, added analytical summaries of tasks in terms of status, percentages of what's done and what's in progress.
    - Made the website mobile responsive. The navbar turns into hamburger style on mobile screens.



- **Ali**

- Added to the API Gateway the route of `POST /task`.
- Created the Lambda function called `create-task`, added a trigger to the API Gateway.
- Added the code to allow putting items from the request into DynamoDB.
- Ensured the Lambda had the correct IAM role to access and write to DynamoDB.
- Used the Test event to check functionality and allowed Lambda access to CloudWatch to see logs and errors.
- Tested the API Gateway endpoint on a website like Postman.
- In the CloudWatch dashboard:
  - Created a dashboard and added multiple widgets with useful information (line graphs, pie charts, numbers).
  - Chose metrics such as S3 usage, RDS metrics.
  - Organized all widgets in a visually pleasing way.
  - Added a CloudWatch alarm based on a selected metric (e.g., EC2 CPU utilization > 80% for 3 data points within 15 mins).



- Roaa

- Implemented the very first versions of `deleteTask`, `getTasks`, `getTask` that were later heavily modified for project compatibility.
- Set up the flow of sending an email for task updates:
  - Created SNS topic, set up SQS queue and DLQ.
  - Had the `TaskNotificationQueue` subscribe to the SNS topic.
  - Linked it to the `sendTaskUpdateEmail` Lambda function.
  - Set up SES and verified sender emails.
- Ensured API Gateways are connected to the correct Lambda functions.
- Designed the architecture diagram of the entire system with detailed connections and simple color coding.



- Yousef

- Phase 1:

- Created API Gateway with Alaa and chose a deployment stage ( `stage-cors` ) to connect all routes and Lambda functions.
    - Created Lambda function for updating tasks, connecting it to the RDS and placing it within the VPC.
    - Remotely accessed the RDS database through the EC2 instance to create the tables.

- Phase 2:

- Refactored database table architecture and tables for smooth functionality.
    - Created AWS Cognito User Pool and app client; configured it to use hosted UI/managed login.
    - Integrated authentication in the frontend using the `useAuth` hook and redirected login/register/logout to AWS Cognito managed login.
    - Worked on post-signup Lambda trigger to add users to the RDS database.
    - Addressed RDS connection issues using security groups and placing Lambda in the same subnet as the database.
    - Worked on frontend pages: home, tasks, task creation, task edit.
    - Connected frontend with API Gateway endpoints.

- Phase 3:

- Researched how to make the web server use HTTPS instead of HTTP.
    - Evaluated using Let's Encrypt vs using `nip.io` (mapped IP address to HTTPS hostname).
    - Deployed web app using Nginx, configured server, built frontend, and copied `/dist` files to the public Nginx directory.
    - Fixed frontend bugs and minor backend logic issues.