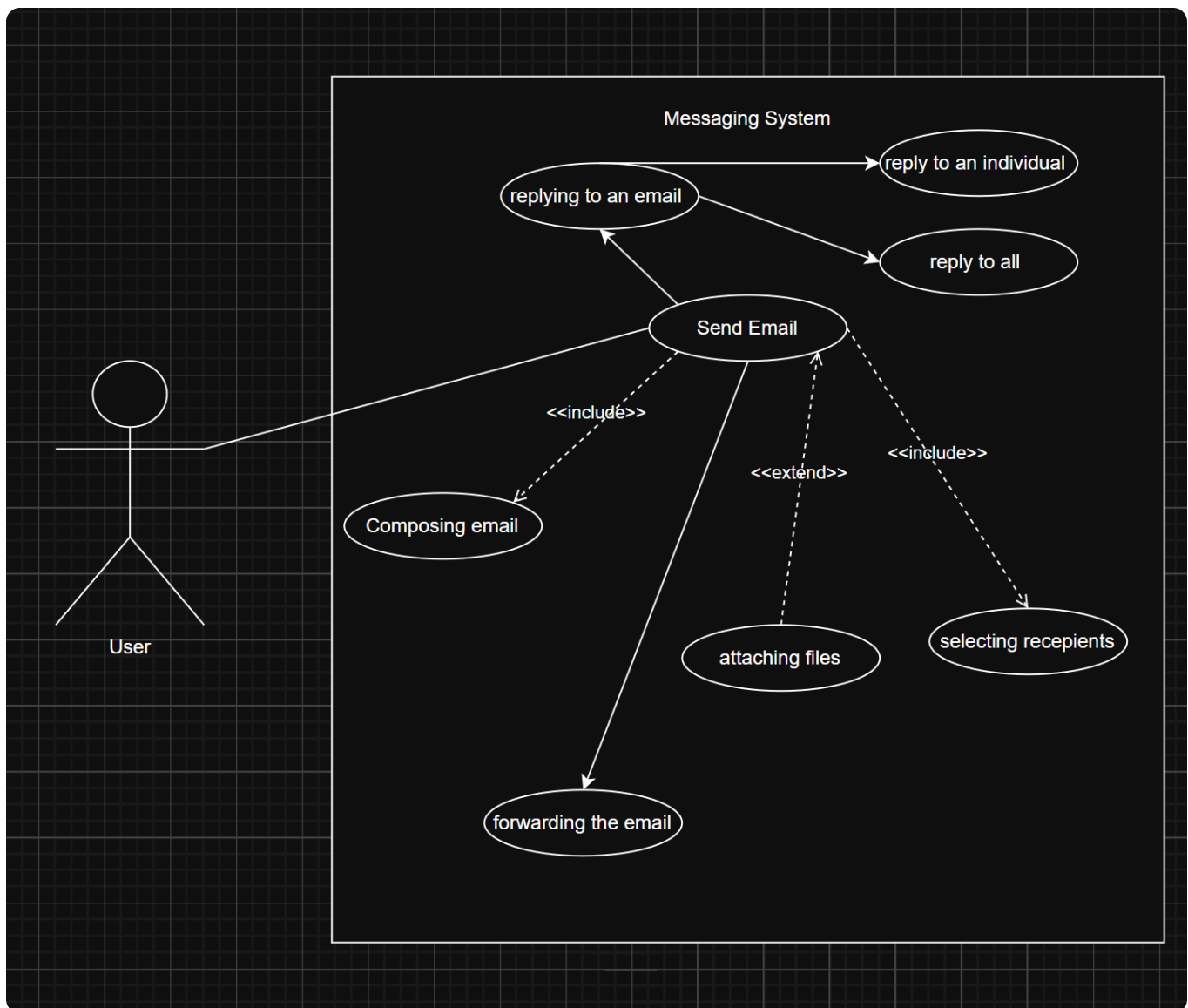


# Software engineering 08-10-2025 - TP - Use case - UML

## Use Case Description Attributes

Attribute	Description
<b>Use Case Name</b>	<ul style="list-style-type: none"><li>- Describes a behavior (use verbs)</li><li>- Name should be short, meaningful, and <b>unique</b></li></ul>
<b>ID</b>	Numeric identifier, <b>unique</b> for each use case
<b>Brief Description</b>	One paragraph summarizing the use case
<b>Primary Actors</b>	Actors who <b>initiate</b> the use case
<b>Secondary Actors</b>	Actors who <b>interact</b> with the use case
<b>Preconditions</b>	<ul style="list-style-type: none"><li>- System state <b>before</b> execution</li><li>- Must be true before starting the use case</li></ul>
<b>Postconditions</b>	<ul style="list-style-type: none"><li>- System state <b>after</b> execution</li><li>- Must be true once the use case is completed</li></ul>
<b>Basic Path / Main Flow</b>	- Typical sequence of steps when everything goes as expected during the execution of the use case
<b>Alternative Paths / Exceptions</b>	- What happens if something goes wrong or optional branches occur

## Exercise 2:



i chose to let replying and forwarding use cases to be inherited, in order to inherit all the include and extend cases from the parent use case.

Based on the Messaging System use case diagram, here's the use case table for "Send Email":

Attribute	Description
Use Case Name	Send Email
ID	001
Brief Description	User composes and sends an email to recipients with optional attachments
Primary Actors	User
Secondary Actors	-
Preconditions	<ul style="list-style-type: none"><li>- User is logged in</li><li>- Valid email account exists</li></ul>

Attribute	Description
Postconditions	<ul style="list-style-type: none"> <li>- Email is sent successfully</li> <li>- Email saved in sent folder</li> </ul>
Basic Path / Main Flow	<ol style="list-style-type: none"> <li>1. User starts composing email</li> <li>2. User writes message and selects recipients</li> <li>3. User attaches files (optional)</li> <li>4. User clicks send</li> <li>5. System sends email and confirms delivery</li> </ol>
Alternative Paths / Exceptions	<p><b>Reply to Individual:</b> User replies to sender only</p> <p><b>Reply to All:</b> User replies to all recipients</p> <p><b>Forward:</b> User forwards email to new recipients</p> <p><b>Attachment too large:</b> System tells the user to reduce size</p> <p><b>failed to be send:</b> Email saved in draft for another time</p>

## Exercise 3:

