

# System Mode and User Mode in Salesforce

## System Mode:

1. System mode running apex code by ignoring user's permissions.
2. In system mode, Apex code has access to all objects and fields permissions, field-level security, sharing rules aren't applied for the current user.

## User Mode:

1. User mode running apex code by respecting user's permissions and sharing of records.
2. Profile level permissions, field-level security, and sharing rules are applied for the current user.

## Modes Of Execution in Salesforce

Apex Class	System Mode
Triggers	1. If triggers call an apex class with sharing keyword, Then record level access permissions will be considered.
Anonymous Apex	User Mode
Apex Webservices (SOAP API and REST API)	System Mode
Validation Rule	System Mode
Workflow Rule	System Mode
Process Builder	System Mode
Formula Fields	System Mode
Custom Button	System Mode
Roll Up Summary Fields	System Mode
Auto Response Rule	System Mode
Assignment Rule	System Mode

Escalation Rule	System Mode
Approval Process	System Mode
Flows	<p>By Default runs in User Mode</p> <ol style="list-style-type: none"> <li>1. if flow called from Process Builder it runs in System Mode.</li> <li>2. if flow called from Workflow it runs in System Mode.</li> <li>3. if flow called from Apex it runs depends on With or Without Sharing of apex class</li> </ol>
Test Class	<ol style="list-style-type: none"> <li>1. Test Method with System.runAs() runs in User Mode.</li> <li>2. Test Method without System.runAs() runs in System Mode.</li> </ol>
All Type of Jobs	System Mode
Email Service	User Mode
Visualforce Page	<p>Standard Controller --- User Mode  Standard Controller With Extensions --- System Mode  Custom Controller---- Based Sharing Keyword Used in Apex Class.</p>
Visualforce Component	It depends on the Visualforce page where it is used.
Chatter in Apex	User Mode
Macros	System Mode
InvocableMethod	<ol style="list-style-type: none"> <li>1. if it is called from Flow it will run in User Mode.</li> <li>2. if it is called from Process Builder (does it depends on with or without sharing is specified on that Class), then runs in System Mode</li> </ol>
Publisher Action	System Mode
Custom Button	System Mode