

Unit 1: Get Started with the Platform Developer I Certification Prep

Learning Objectives

After completing this unit, you'll be able to:

- Describe the key topic areas of the Platform Developer I Certification.
- Access resources that help you prepare for the Platform Developer I Certification.

The Platform Developer I Certification

The Salesforce Platform Developer I credential is designed for individuals who have experience developing and deploying basic business logic and user interfaces using the programmatic capabilities of the Lightning Platform.

This exam covers these key topics, each making up a certain percentage of the exam.

- Salesforce fundamentals: 7%
- Data modeling and management: 13%
- Process automation and logic: 38%
- User interface: 25%
- Testing, debugging and deployment: 17%

Preparing for the Exam

Preparing for the Platform Developer I Certification exam takes time! This module takes you through preparing for part of the exam. There are three additional modules to help you continue your journey toward certification.

- Platform Developer I Certification Prep: Process Automation and Logic
- Platform Developer I Certification Prep: User Interface
- Platform Developer I Certification Prep: Testing, Debugging, and Deployment

All four modules contain real-world scenarios, interactive flashcards, links to resources, and key topic areas to study.

Don't forget to join the [Trailblazer Community](#), where you can ask questions, collaborate, and join groups to help you prepare for your exam.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Download the Guide

Would you like a hard copy of the contents in these modules? Each module includes a link to a printable version you can download. Download the [Platform Developer I Certification Prep: Salesforce Fundamentals, Data Modeling and Management guide](#).

Exam Logistics and Policies

Curious about the logistics of the exam? Here are some quick facts for you.

Recommended Experience	1 to 2 years of experience as a developer and at least 6 months of experience on the Lightning Platform
Number of Questions	60 multiple choice/multiple select questions
Passing Score	62%
Results	Received immediately
Cost	First attempt: \$200 plus tax. Additional attempts are half price
Location	Online or at a facility in your area
Restrictions	No hard-copy or online materials can be referenced during the exam

The quality of our certification exams and the value our credentials provide is our highest priority. Protecting the security and confidentiality of our exams is essential to providing our customers with credentials that are respected and industry-leading.

As a participant of the Salesforce Certification program, you're required to accept the terms of the [Salesforce Certification Program Agreement](#). Click [here](#) to take a look at some important reminders about the certification exam.

Maintain Your Certification

Once you take and pass your exam, how do you maintain your certification?

To maintain Salesforce Certification credentials, all certified professionals must successfully complete release maintenance exams specific to their credential. So, you need to complete the Platform Developer I Certification Maintenance module that's provided for each release. There are three releases each year for the Platform Developer I Certification (Spring, Summer, Winter). If you don't complete your maintenance requirements by the completion due date, your credentials expire.

Note: If you'd like more information about certification maintenance, visit the [Maintaining Your Salesforce Credential](#) page.

Prepping for the Exam

This module is focused on these key topics, with each topic covered in its own unit.

- Salesforce fundamentals: 7%
- Database modeling and management: 13%

In each of the units, you learn the key areas to study for these three sections of the exam, including working through common scenarios.

Next, let's study up on Salesforce fundamentals.

Unit 2: Review Salesforce Fundamentals

Learning Objectives

After completing this unit, you'll be able to:

- Describe the considerations for developing in a multitenant environment.
- Understand design frameworks and how to build applications using declarative and programmatic tools.
- Recognize use cases for declarative versus programmatic customizations.

Key Topics


This unit prepares you for the Salesforce fundamentals section of the Platform Developer I exam, which makes up 7% of the overall exam. This section of the exam tests these topics.

- Multitenant environments
- Declarative vs. programmatic customization

This unit provides a number of interactive, real-world, scenario-based questions that are a lot like the ones you can encounter as a Salesforce developer. Looking at these scenarios helps prepare you to take the Salesforce fundamentals section of the Platform Developer I exam. As you tackle the practice questions, you get immediate feedback on your answers, along with detailed information on why your answers are correct (or incorrect).

The unit also contains interactive flashcards to help you prepare for the Salesforce fundamentals section of the exam.

Exam Practice Questions

Ready to jump in? The sample tool below is not scored—it's just an easy way to quiz yourself. To use it, read the scenario and click the answer you think is correct. Some questions may have more than one correct answer. Click **Submit** and you get a popup telling you whether the answer you chose is correct or incorrect, and why; if there's a longer explanation, click  and then click anywhere in the window to close it. When you reach the end, you can review the answers or retake the questions.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 1

What is a correct pattern to follow when programming in Apex on a multitenant platform?

ANSWER	FEEDBACK
A. USE THE <code>WITH SHARING</code> KEYWORD WHEN DECLARING AN APEX CLASS TO PREVENT ACCESS FROM OTHER SERVER TENANTS.	Incorrect. The <code>with sharing</code> keyword allows you to specify that the sharing rules for the current user are considered for the class. It does not restrict access to servers.
B. USE QUERIES TO SELECT THE FEWEST FIELDS AND RECORDS POSSIBLE TO AVOID EXCEEDING GOVERNOR LIMITS.	Correct. There are governor limits for the Apex runtime on a multitenant platform. A multitenant environment can monopolize their shared resources. The Apex governor limits ensure that the Apex code or processes are not able to do that.
C. CREATE APEX CODE IN A SEPARATE ENVIRONMENT FROM THE SCHEMA TO REDUCE DEPLOYMENT ERRORS.	Incorrect. The developer needs to create Apex code in the same environment as the schema, or the code will not have access to the schema, and it will not compile.
D. RUN DATA MANIPULATION LANGUAGE (DML) ON ONE RECORD AT A TIME TO AVOID POSSIBLE DATA CONCURRENCY ISSUES.	Incorrect. Running DML on one record at a time increases the likelihood of reaching the governor limits.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 2

Which two types of code represent the controller in model-view-controller (MVC) architecture on the Lightning Platform? (Select two answers.)

ANSWER

FEEDBACK

A. STANDARDCONTROLLER SYSTEM METHODS THAT ARE REFERENCED BY VISUALFORCE

Correct. The MVC architecture on the Lightning Platform splits the Controller into two parts. They both do operations and execute the logic. One takes care of the client side, and the other handles the server side.

B. JAVASCRIPT THAT IS USED TO MAKE A MENU ITEM DISPLAY ITSELF

Incorrect. JavaScript when used to manipulate the display of menu items is included in the View in the MVC architecture.

C. A STATIC RESOURCE THAT CONTAINS CASCADING STYLE SHEETS (CSS) AND IMAGES

Incorrect. Static resources provide the View in the MVC architecture.

D. CUSTOM APEX AND JAVASCRIPT CODE THAT IS USED TO MANIPULATE DATA

Correct. The MVC architecture on the Lightning Platform splits the Controller into two parts. They both do operations and execute the logic. One takes care of the client side, and the other handles the server side.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 3

What should a developer do to update a picklist field on related opportunity records when a modification to the associated account record is detected?

ANSWER	FEEDBACK
A. CREATE A WORKFLOW RULE WITH A FIELD UPDATE.	Incorrect. When using workflow rules, you can only update the record or its parent.
B. CREATE A VISUALFORCE PAGE.	Incorrect. Creating a Visualforce page for this scenario is additional work, and it will only work if the update is made through the Visualforce page. This can be accomplished better in a trigger.
C. CREATE A LIGHTNING COMPONENT.	Incorrect. Creating a Lightning component for this scenario is additional overhead, and it will only work if the update is made through the Lightning component. This can be accomplished better in a trigger.
D. CREATE A PROCESS WITH PROCESS BUILDER.	Correct. Creating the process using Process Builder helps the developer control the schedule of the process. It also allows the process to run as planned instead of doing things manually.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Exam Topic Flashcards

The following flashcards cover UI features, company information, and org-wide settings. Use these interactive flashcards to brush up on some of the key topics you'll find on this part of the exam.



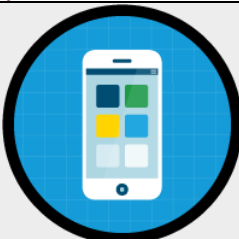
Read the question or term on each card, then click on the card to reveal the correct answer. Click the right-facing arrow to move to the next card, and the left facing arrow to return to the previous card.

Question/Term	Answer/Definition
An important consideration when developing in a multitenant environment	Governor limits
Which three declarative methods help ensure quality data? Validation Rules, Lookup filters, Workflow Alerts, Page Layouts or Exception Handling	Validation Rules, Lookup filters, Page Layouts

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Related Badges

Looking for more information? Explore these related badges.

Badge	Content Type
 Platform Development Basics	Module
 Apex & .NET Basics	Module
 Quick Start: Build a Salesforce App	Module

You've reviewed the Salesforce fundamentals. Next, let's take a look at data modeling and management.

Unit 3: Practice Data Modeling and Management

Learning Objectives

After completing this unit, you'll be able to:

- Determine the appropriate data model based on specific requirements.
- Describe the capabilities of various relationship types.
- Describe the use cases for formula fields and roll-up summary fields.
- Describe the options and considerations for importing and exporting data into development environments.


Key Topics

This unit prepares you for the data modeling and management section of the Platform Developer I exam, which makes up 13% of the overall exam. This section of the exam tests these topics.

- Data models
- Relationship types
- Formula fields and roll-up summary fields
- Importing and exporting data

Like the previous unit, this unit contains practice scenario-based questions and flashcards.

Exam Practice Questions

Ready to jump in? The sample tool below is not scored—it's just an easy way to quiz yourself. To use it, read the scenario and click the answer you think is correct. Some questions may have more than one correct answer. Click Submit and you get a popup telling you whether the answer you chose is correct or incorrect, and why; if there's a longer explanation, click  and then click anywhere in the window to close it. When you reach the end, you can review the answers or retake the questions.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 1

A developer is creating an application to track engines and their parts. An individual part can be used in different types of engines. Which data model should the developer use to track the data and to prevent orphan records?

ANSWER	FEEDBACK
A. CREATE A MASTER-DETAIL RELATIONSHIP TO REPRESENT THE ONE-TO-MANY MODEL OF ENGINES TO PARTS.	Incorrect. A master-detail relationship will prevent orphan records. However, a one-to-many relationship will only allow a part to be related to one engine, or an engine to have only one part.
B. CREATE A LOOKUP RELATIONSHIP TO REPRESENT HOW EACH PART RELATES TO THE PARENT ENGINE OBJECT.	Incorrect. A lookup relationship has no effect on object deletion and will not prevent orphan records, and it will only allow a part to be related to one engine or an engine to have only one part.
C. CREATE A JUNCTION OBJECT TO RELATE MANY ENGINES TO MANY PARTS THROUGH LOOKUP RELATIONSHIPS.	Incorrect. A junction object should be created because an engine has many parts and a component can be part of many engines. But a lookup relationship will not prevent orphan records.
D. CREATE A JUNCTION OBJECT TO RELATE MANY ENGINES TO MANY PARTS THROUGH MASTER-DETAIL RELATIONSHIPS.	Correct. A junction object should be created because an engine has many parts and a component can be part of many engines. A master-detail relationship will prevent orphan records.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 2

A company wants a recruiting app and data model for job candidates and interviews, with the following requirements.

- 1) Display the total number of interviews on each candidate record.
- 2) Define security on interview records that's independent from the security on candidate records.

Which two things should a developer do to accomplish this? (Select two answers.)

ANSWER	FEEDBACK
A. CREATE A LOOKUP RELATIONSHIP BETWEEN THE CANDIDATE AND INTERVIEW OBJECTS.	Correct. The security of the interview records needs to be defined independently of the candidate records, so you must use a lookup relationship.
B. CREATE A MASTER-DETAIL RELATIONSHIP BETWEEN THE CANDIDATE AND INTERVIEW OBJECTS.	Incorrect. A master-detail relationship in this case requires that users have access to candidate records in order to have access to interview records.
C. CREATE A ROLL-UP SUMMARY FIELD ON THE CANDIDATE OBJECT THAT COUNTS INTERVIEW RECORDS.	Incorrect. A roll-up summary requires the use of a master-detail relationship. A master-detail relationship in this case requires that users have access to candidate records in order to have access to interview records.
D. CREATE A TRIGGER ON THE INTERVIEW OBJECT THAT UPDATES A FIELD ON THE CANDIDATE OBJECT.	Correct. The security of the interview records needs to be defined independently of the candidate, so you must use a lookup relationship. Since you have to use a lookup relationship, you cannot define a rollup summary field and a trigger is needed.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 3

A developer has the following trigger that fires after insert and creates a child case whenever a new case is created.

```
List<Case> childCases = new List<Case>();
for (Case parent : Trigger.new )
{
    Case child = new Case(ParentId = parent.Id, Subject = parent.Subject);
    childCases.add( child );
}
insert childCases;
```

Which unexpected behavior happens after the code block executes?

ANSWER	FEEDBACK
A. A CHILD CASE IS CREATED FOR EACH PARENT CASE IN TRIGGER.NEW.	Incorrect. This is in fact correct; however, option b gives a more detailed answer of what happens when this code runs.
B. THE TRIGGER ENTERS AN INFINITE LOOP AND EVENTUALLY FAILS.	Correct. The code sample shows a recursive trigger, caused by the trigger being fired each time a new case is created inside the for loop. This creates an infinite loop and eventually causes the code to fail.
C. MULTIPLE CHILD CASES ARE CREATED FOR EACH PARENT CASE IN TRIGGER.NEW.	Incorrect. One child is being created per parent case within the for loop.
D. THE TRIGGER FAILS IF THE SUBJECT FIELD ON THE PARENT IS BLANK.	Incorrect. Subject is not a required field when creating a new case.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 4

On which object can an administrator create a roll-up summary field?

ANSWER	FEEDBACK
A. ANY OBJECT THAT IS ON THE MASTER SIDE OF A MASTER-DETAIL RELATIONSHIP.	Correct. A roll-up summary field is created by showing a value from the master record that comes from field values within the detail record. The detail record should have a master-detail relationship with the master in order to calculate the values from related records.
B. ANY OBJECT THAT IS ON THE DETAIL SIDE OF A MASTER-DETAIL RELATIONSHIP.	Incorrect. Roll-up summary fields display a value in a master record based on the values of fields in a detail record, but the roll-up summary field isn't created on the detail side. The detail record must be related to the master through a master-detail relationship.
C. ANY OBJECT THAT IS ON THE PARENT SIDE OF A LOOKUP RELATIONSHIP.	Incorrect. A master-detail relationship should exist in order to calculate values for the roll-up summary field.
D. ANY OBJECT THAT IS ON THE CHILD SIDE OF A LOOKUP RELATIONSHIP.	Incorrect. A master-detail relationship should exist in order to calculate values for the roll-up summary field.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 5

A developer wants to create a custom object to track customer invoices. How should you relate invoices and accounts to ensure that all invoices are visible to everyone with access to an account?

ANSWER	FEEDBACK
A. THE ACCOUNT SHOULD HAVE A LOOKUP RELATIONSHIP TO THE INVOICE.	Incorrect. A lookup relationship can share details between two objects, but doesn't meet the relationship requirements stated between invoices and accounts.
B. THE INVOICE SHOULD HAVE A LOOKUP RELATIONSHIP TO THE ACCOUNT.	Incorrect. A lookup relationship can share details between two objects, but doesn't meet the relationship requirements stated between invoices and accounts.
C. THE ACCOUNT SHOULD HAVE A MASTER-DETAIL RELATIONSHIP TO THE INVOICE.	Incorrect. It's not possible to make a standard object (Account) a child to a custom object (Invoice) in a master-detail relationship.
D. THE INVOICE SHOULD HAVE A MASTER-DETAIL RELATIONSHIP TO THE ACCOUNT.	Correct. There must be a master-detail relationship to make sure that all child (invoice) records are visible to anyone with access to the account, which is the master.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 6

A custom field on the Account object was required for prototyping but is no longer needed. Using Schema Builder, what is the correct process for a developer to delete the custom field?

ANSWER	FEEDBACK
A. DELETE THE FIELD FROM SCHEMA BUILDER AND THEN ALL REFERENCES IN THE CODE WILL BE REMOVED.	Incorrect. If you delete the field from Schema Builder before you remove all references in the code, the user will get an error showing the places that field is being referenced.
B. REMOVE ALL THE REFERENCES IN THE CODE AND THEN THE FIELD WILL BE REMOVED FROM SCHEMA BUILDER.	Incorrect. The field will not be automatically removed from Schema Builder after the removal of references. The deletion has to be made manually.
C. MARK THE FIELD FOR DELETION IN SCHEMA BUILDER AND THEN DELETE IT FROM THE DECLARATIVE UI.	Incorrect. This cannot be done. The field needs to be removed from the code before removing it from the Schema Builder or the declarative UI.
D. REMOVE ALL REFERENCES FROM THE CODE AND THEN DELETE THE CUSTOM FIELD FROM SCHEMA BUILDER.	Correct. Only after deleting the references from the code can you delete the field from Schema Builder.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 7

When loading data into an organization, which two actions should a developer take to match the updates to existing records? (Select two answers.)

ANSWER	FEEDBACK
A. MATCH AN AUTO-GENERATED NUMBER FIELD TO A COLUMN IN THE IMPORTED FILE.	Incorrect. A Number field cannot be used to update records.
B. MATCH THE ID FIELD TO A COLUMN IN THE IMPORTED FILE.	Correct. Using the Salesforce ID makes it easier to update the records so that they are aligned.
C. MATCH AN EXTERNAL ID TEXT FIELD TO A COLUMN IN THE IMPORTED FILE.	Correct. A custom field with an External ID attribute, makes it easier to update the records so that they are aligned.
D. MATCH THE NAME FIELD TO A COLUMN IN THE IMPORTED FILE.	Incorrect. The Name field cannot be used to upsert records.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 8

Which three statements are true regarding cross-object formula fields? (Select three answers.)

ANSWER	FEEDBACK
A. FORMULA FIELDS CAN REFERENCE FIELDS FROM MASTER-DETAIL OR LOOKUP PARENT RELATIONSHIPS.	Correct. A cross-object formula can reference merge fields from a master (“parent”) object if an object is on the detail side of a master-detail relationship. A cross-object formula also works with lookup relationships.
B. FORMULA FIELDS CAN REFERENCE FIELDS IN A COLLECTION OF RECORDS FROM A CHILD RELATIONSHIP.	Incorrect. Formula fields cannot access a collection of records. You can perform actions on a collection of child records using roll-up summary fields.
C. FORMULA FIELDS CAN EXPOSE DATA THE USER DOES NOT HAVE ACCESS TO IN A RECORD.	Correct. Formula fields can expose data that the user does not have access to. For example, if you create a formula field on the Case object that references an account field and display that formula field in the Case page layout, users can see this field even if they don’t have access to the account record.
D. FORMULA FIELDS CAN REFERENCE FIELDS FROM OBJECTS THAT ARE UP TO 10 RELATIONSHIPS AWAY.	Correct. A cross-object formula is available anywhere formulas are used except when creating default values.
E. FORMULA FIELDS CAN BE USED IN THREE ROLL-UP SUMMARIES PER OBJECT.	Incorrect. The only formulas you can use in roll-up summary fields are COUNT, SUM, MIN, MAX.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 9

In an organization that has enabled multiple currencies, a developer needs to aggregate the sum of the Estimated_Value__c currency field from the CampaignMember object using a roll-up summary field called Total_Estimated_Value__c on Campaign.

How is the currency of the Total_Estimated_Value__c roll-up summary field determined?

ANSWER	FEEDBACK
A. THE VALUES IN CAMPAIGNMEMBER.ESTIMATED_VALUE__C ARE CONVERTED INTO THE CURRENCY ON THE MAJORITY OF THE CAMPAIGNMEMBER RECORDS AND THE SUM IS DISPLAYED USING THAT CURRENCY.	Incorrect. The currency of the master record determines the currency of the roll-up summary field.
B. THE VALUES IN CAMPAIGNMEMBER.ESTIMATED_VALUE__C ARE CONVERTED INTO THE CURRENCY OF THE CURRENT USER, AND THE SUM IS DISPLAYED USING THE CURRENCY ON THE CAMPAIGN RECORD.	Incorrect. The currency of the master record determines the currency of the roll-up summary field.
C. THE VALUES IN CAMPAIGNMEMBER.ESTIMATED_VALUE__C ARE CONVERTED INTO THE CURRENCY OF THE CAMPAIGN RECORD, AND THE SUM IS DISPLAYED USING THE CURRENCY ON THE CAMPAIGN RECORD.	Correct. If your organization uses multiple currencies, the currency of the master record determines the currency of the roll-up summary field. For example, if the master and detail records are in different currencies, the detail record value is converted into the currency of the master record.
D. THE VALUES IN CAMPAIGNMEMBER.ESTIMATED_VALUE__C ARE SUMMED UP AND THE RESULTING TOTAL_ESTIMATED_VALUE__C FIELD IS DISPLAYED AS A NUMERIC FIELD ON THE CAMPAIGN RECORD.	Incorrect. The values in CampaignMember.Estimated_Value__c should be converted and not summed.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Scenario 10

The sales management team hires a new intern. The intern is not allowed to view opportunities, but needs to see the most recent closed date of all child opportunities when viewing an account record.

What should a developer do to meet this requirement?

ANSWER	FEEDBACK
A. CREATE A WORKFLOW RULE ON THE OPPORTUNITY OBJECT THAT UPDATES A FIELD ON THE PARENT ACCOUNT.	Incorrect. This would work, but it is not necessary since this can easily be done using a roll-up summary field.
B. CREATE A ROLL-UP SUMMARY FIELD ON THE ACCOUNT OBJECT THAT PERFORMS A MAX ON THE OPPORTUNITY CLOSE DATE FIELD.	Correct. Fields that users can't see because of field-level security settings on the detail record are still calculated in a roll-up summary field.
C. CREATE A FORMULA FIELD ON THE ACCOUNT OBJECT THAT PERFORMS A MAX ON THE OPPORTUNITY CLOSE DATE FIELD.	Incorrect. Using formula fields can result in a value returning, #Error!, which can affect the summarized total. If #Error! is included in the results, the calculations for MAX will exclude those formula values.
D. CREATE A TRIGGER ON THE ACCOUNT OBJECT THAT QUERIES THE CLOSE DATE OF THE MOST RECENT OPPORTUNITIES.	Incorrect. A trigger would not work since the field would only be up to date once the account is updated. If only the opportunity is updated, the account field would be out of sync.

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Exam Topic Flashcards

The following flashcards cover schema design and modifications and data models. Use these interactive flashcards to brush up on some of the key topics you'll find on this part of the exam.




Read the question or term on each card, then click the card to reveal the correct answer. Click the right-facing arrow to move to the next card, and the left-facing arrow to return to the previous card.

Question/Term	Answer/Definition
To which primitive data type in Apex is a currency field automatically assigned?	Decimal
A company has a custom object named Warehouse. Each Warehouse record has a distinct record owner, and is related to a parent Account in Salesforce. What kind of relationship should a developer use to relate the Account to the Warehouse?	Lookup Relationship

Platform Developer I Certification Prep: Salesforce Fundamentals, Database Modeling and Management

Related Badges

Looking for more information? Explore these related badges.

Badge	Content Type
 Data Modeling	Module
 Data Management	Module
 Formulas & Validations	Module

Congratulations! You’ve studied up on data modeling and management.