Well-Architected Design Standards Template

Note that all italicized items in the sections below are examples. Remove or modify them and add your own as needed. Add or modify sections as needed and remove any sections that are not relevant to your organization.

Overview and Scope

This document contains design standards for Salesforce Projects delivered by [Organization]. It specifically covers Salesforce Architecture and related topics. It does not cover [list any exclusions here (example: non-Salesforce systems)]. [Add any additional organization-specific overview text here].

Guiding Principles

This section contains a list of guiding principles that will be used to define all standards outlined in this document. If you're unclear about why a standard is in place or whether a standard needs to be added or changed, refer to this list.

- Use built-in Platform services and avoid customizations whenever possible
- Consider AppExchange apps before building a custom solution
- Use low code (declarative) customizations before writing code
- [Insert additional organization-specific guiding principles here]

Definitions

This section contains definitions of terms that are used throughout this document.

| Term | Definition |
|--|---|
| API | Application Programming Interface - Provides programmatic access to information or functionality within your system. |
| Stateful | Communications that retain information about transactions or sessions |
| Stateless | Communications that do not retain information about transactions or sessions |
| Synchronous | A process or function that executes a task within a single thread, requiring the user to have to wait until it finishes before completing any additional tasks. |
| Asynchronous | A process or function that executes a task "in the background" without the user having to wait for the task to finish. |
| [Add additional Terms Relevant to your Organization] | [Definitions] |

Naming Conventions

This section contains rules to follow when naming entities in your system. Naming conventions must be followed to ensure readability and long term maintainability. Refer to Simple - Readability for more information.

GENERAL RECOMMENDATIONS

- Use whole words, avoid acronyms and abbreviations.
- Always fill the description field on custom components.
- For "natural text" capitalization, capitalize principal words and lowercase minor words.

| Туре | Capitalization | Naming Convention | Comments | Wrong Examples | Good Examples |
|-------------------------|----------------|--|--|--|------------------------------------|
| Apex Class | PascalCase 🗸 | <namespace>_<class name=""><optional suffic=""></optional></class></namespace> | Namespace: optional. Short often an acronyn. Use only for classes that are exclusive to a single applyreject, and sure to stay that way over time. Don't contase that way over time. Don't contase packages or drov orgel Class name: nours, describing the class's handboard purpose. Avoid Subtract indicates common class types - Controller, Edwardson, Handler, Utilities, Tugger-Handler, Businger-Handler, Utilities, Tugger-Handler, Starter | CustomerAssessment – Lacks project manespace + suffic no bovious what it does. SmallbusinessConfigureActPriving Tool: C ustomerAssessmentController – Namespace too fung. Use acromy imited Manespace too fung. Use acromy imited SGCPTCustomerAssessmentController – Where does namespace end and class ment start? Use underscore. SGCPTC_ustomer.Assessment, Controller – Uses underscores whith the class name. | SBCPT_CustomerAssessmentController |
| [Insert your own items] | ~ | | | | |

Data Management

This section contains information about data classifications, encryption requirements and archiving and purging criteria.

Data Classifications

This section contains information about data owners, field usages, data sensitivity, and compliance categorization relevant to any standard or custom object and field. Data classifications must be taken into consideration for all system configuration and automation design processes in order to ensure that data usage remains in compliance with legal, industry and organizational policies and regulations. Refer to Compliant - Legal Adherence for more information.

| Object | Field | Data Owner | CCPA - California Consumer Privacy Act | COPPA - Children's Online Privacy Protection Act | GDPR - General Data Protection Regulation | HIPAA - Health Insurance Portability and Accountability Act | PCI - Payment Card Industry | PII - Personally Identifiable Information | Other Compliance Categorization or Company Policy | Data Sensitivity Level | Field Usage | |
|-------------------------------|--------------------|------------|---|--|---|--|--------------------------------|---|---|---------------------------|-------------|---|
| Contact | First Name | Sales | | | | | | | N/A | Internal ~ | Active | ~ |
| Contact | Last Name | Sales | | | Z | Z | | Z | N/A | Internal v | Active | ~ |
| Contact | Credit Card Number | Sales Ops | | Z | Z | | | Z | N/A | Confidential v | Active | ~ |
| Contact [Insert your data] | Date of Birth | Sales | | | | | | | N/A | Restricted ~ | Active | ž |

Encryption

This section contains information about fields to encrypt either in transit, at rest or both. This information must be taken into consideration during the design of automations and integrations to ensure that data is not inadvertently exposed to security vulnerabilities. Refer to Secure - Data Security for more information.

| Object | Field | Encrypted In Transit | Encrypted At Rest |
|--------------------|--------------------|----------------------|-------------------|
| Contact | First Name | | |
| Contact | Last Name | | |
| Contact | Date of Birth | | |
| Contact | Credit Card Number | | Z |
| [Insert your data] | | | |

Data Archiving and Purging

This section contains information about archiving and purging criteria for the objects in your system. This information must be taken into consideration during the design of any automated archiving and retrieval processes. Refer to Resilient - Continuity Planning for more information.

| Object | Criteria for Archiving | Criteria for Purging | Special Considerations |
|------------------------|--|---|---|
| | | | Archive all related contacts and transactions and maintain relationship information in the archive system. |
| Contact | No longer associated with the account OR no activity for more than 18 months | Same as archiving | Archive or update the primary contact on all related transactions |
| Case | Status = Closed for more than 12 months | Status = Closed for more than 24 months | Retain the calculated values of all formula fields during the archival process. |
| [Insert your own data] | | | |

Automations

This section contains information about approved design patterns for automations, protocols for cross component communications, custom settings and error handling.

Approved Design Patterns

This section contains information about design patterns that are approved (or not approved) for specific use cases. Refer to Automated - Transaction Handling for more information.

| Pattern | Approved Use Cases | Do NOT use when |
|----------------------------|---|--|
| Synchronous Operations | Logic that is relevant to what users need done in real time or near real time | |
| Asynchronous Operations | Logic that can be deferred to a later time | Users require results in order to complete a subsequent task. |
| [Insert your own patterns] | | |

Protocols for Cross Component Communications

This section contains information about the protocols to use when sending communications between components within the same system. Refer to Composable - Interoperability for more information.

| Protocol | Use Case | Do NOT use when |
|-------------------|-----------------|-----------------|
| RESTAPI | Create a record | |
| [Insert your own] | | |

Alerts, Notifications and Error Messages

This section contains information about the process to handle errors and notifications for different types of events within the system. Refer to Automated - Error Handling for more information.

| Message Type | Pattern | Expected User Action | Approved Use Cases | Do NOT use when |
|-------------------------------|---------------|--|--|--|
| Error Message | Modal Window | Follow the instructions in the message | Users need to take action on an error message before continuing | Do not use for warnings or notifications |
| Notification during a process | Toast Message | Read the message and be aware of it | Users need to be informed of a warning or process completing | User action is required |
| [Insert your own information] | | | | |

Integrations

This section contains information about connected apps, tokens and the overall message structure for integrations. Note that design patterns are listed in the Approved Design patterns in the Automation section.

Connected App and Token Use Cases

This section contains information about approved connected apps, token types and scopes. Formal approval is required for any use cases that aren't explicitly listed in this table. Refer to Connected Apps and OAuth Tokens and Scopes for more information. Refer to Security - Session Security for more information.

| App Name | Use Case | Token Type | Token Scope |
|-------------------|--|--------------|-------------|
| WebsiteApp | Inbound Integration from Website to Create and edit orders | Access Token | Full |
| [Insert your own] | | | |

Message Structure

This section contains information about the elements included in messages and their description. All messages sent between components and systems should adhere to this standard. Refer to Composable - Interoperability for more information.

| Element | Description |
|-------------------|---|
| Header | Contains information about the message itself |
| Inbound Property | Contains information about message source |
| Outbound Property | Contains information about the message target |
| Payload | Contains the business-specific data being transferred |
| [Insert your own] | |
| | |

Artificial Intelligence

This section contains information for approved use cases for AI-based tools along with design standards for chatbots.

AI Use Cases

This section contains information about approved and unapproved use cases for AI related tools and functionality. Refer to Compliant - Artificial Intelligence for more information.

| Tool | Approved Use Cases | Do NOT use for | Considerations |
|--------------------|--|---|------------------------------|
| Chatbots | Service Cloud Call Deflection | | See chatbot design standards |
| Einstein Discovery | Identify patterns in data based on contact purchasing habits | Identify patterns in data based on contact postal codes (may introduce bias) | |
| [Insert your own] | | | |

Chatbot Conversation Design Standards

This section contains a list of required and optional conversation features for chatbot designs. Refer to Compliant - Artificial Intelligence for more information.

| Bot Action | Must Have | Nice to Have |
|---|-----------------------|---------------------|
| Greets the customer | ✓ | |
| Identifies itself as a bot | ✓ | |
| States what it can do | ✓ | |
| Takes communication turns with the user | ~ | |
| Leaves time for the user to read what it says | | |
| Creates a path for follow-ups | ✓ | |
| Apologizes when it can't do something | ✓ | |
| Gives and acknowledges gratitude | ✓ | |
| Closes the conversation | ✓ | |
| Draws attention to buttons or menus | ~ | |
| Addresses the customer by name | | |
| Lets the customer finish typing | | |
| Uses menus to help the customer get started | | |
| Uses quick replies to help the user end a conversational path | | |
| Acknowledges troupble in the chat | | |
| Has a clear voice and tone that is consistent with the organization's messaging | | |
| Avoids all caps (Shouting) | | ✓ |
| Uses emojis for levity | | |
| Collects customer feedback about its interactions | | |
| [Insert your own] | | |

User Experience

This section contains information about UX related topics, including Accessibility, language translations and in-app guidance.

Navigation

This section contains information about the different tools users may use to navigate or input data into your system. Refer to

Engaging - Navigation for more information.

| Input /Navigational Device Type | Use Cases | Testing Process |
|---------------------------------|-------------------------------|---------------------------------|
| Keyboard | Standard Navigation | |
| Mouse | Keystroke-Based Navigation | |
| Screen Reader | Users with visual impairments | Use screen reading software [X] |
| [Insert your own] | | |

Visual Cues

This section contains information about the visual cues you will present to users to help them navigate your application. Cues should be use consistently across all screens and take accessibility into consideration. Refer to Engaging - Navigation for more information.

| Visual Cue | Meaning |
|-------------------|---------|
| Green right arrow | Next |
| Red X | Cancel |
| [Insert your own] | |

Language Translations

This section contains information about words and phrases that will be translated into supported languages within your system. Be sure to take cultural norms into consideration when making translations and ensure that all translations make sense and are not offensive to native speakers of each supported language. Refer to Engaging - Notifications and Messages for more information.

| Word or Phrase | [Supported Language 1] Translation | [Supported Language 2] Translation | [Supported Language n] Translation |
|-------------------|------------------------------------|------------------------------------|------------------------------------|
| Hello | Hola | Bonjour | Caio |
| [Insert your own] | | | |

In-App Guidance

This section contains information about In-App guidance that will be added to your system to help users understand how to use new features and functionality. Refer to In-App Guidance in Lightning Experience for more information. Refer to Engaging - In-App Guidance for more information.

| Use Case | Message Triggers | Message Frequency | Patterns |
|---------------------|--|-------------------|--|
| New Desktop Feature | User navigates to the page associated with the new feature | Once | Display arrows that point to navigation controls with a brief description of their functionality. |
| New Mobile Feature | User opens the app | | Highlight the controls associated with the new feature and provide a link users can tap to view additional information. |
| [Insert your own] | | | |

Application Lifecycle Management

This section contains information about development tools, environments, source control, packaging, test plans and documentation standards.

Approved Development Tools

This section contains a list of tools that are approved for development, along with specific use cases that they are approved and not approved for. Refer to Resilient - Application Lifecycle Management for more information.

| Tool | Approved Use Cases | Do NOT use when | Notes |
|-------------------|--------------------|-------------------------|---|
| SOSL | Searching | | SOSL returns sObjects that need to be cast as records for subsequent DML operations. |
| SOQL | Data Operations | Simply locating records | |
| [Insert your own] | | | |

Environment Strategy

This section contains information about how administrators and developers will use the various sandbox and scratch org environments that are available in your landscape. Refer to Resilient - Application Lifecycle Management for more information.

| Environment Type | Usage | Refresh Interval | Change Migration Process |
|-----------------------|---|------------------|--------------------------|
| Full Copy Sandbox | UAT, Performance, UX, Accessibility Testing | Monthly | Package Installation |
| Partial Copy Sandbox | Integration Testing | Weekly | Package Installation |
| Developer Pro Sandbox | Prototyping/Demo | As Needed | Push / Pull from Source |
| Developer Sandbox | N/A | As Needed | Push / Pull from Source |
| Scratch Org | Local Development with installed packages | | Package Installation |

Source Control Information

This section contains information about the source control system that's currently in use at your organization, along with additional relevant details, including check-in and check-out processes. Refer to Resilient - Application Lifecycle Management for more information.

| System | GitHub |
|-------------------|---|
| URL | https://github.com/[MYORGANIZATION] |
| Check-In Process | Information about your organization's check-in process |
| Check-Out Process | Information about your organization's check-out process |

Currently Defined Package Units

This section contains a list of currently defined package units and their contents. Refer to Composable - Packageability for more information.

| Name | Description |
|-------------------|---|
| pkg_Case | Contains Automations associated with Case Creation and Assignment |
| [Insert your own] | |

Test Plans

This section contains approaches for the different types of testing your teams will perform in order to approve any changes prior to moving them to production. Refer to Resilient - Application Lifecycle Management for more information.

| Category | Approach | Considerations |
|-------------------------|--|--|
| Unit Testing | Developers in Scratch Orgs and Developer Pro Sandboxes | |
| Integration Testing | Project team members in Partial Copy Sandbox | |
| User Acceptance Testing | Business Users in Full Copy Sandbox | |
| Accessibility Testing | Accessibility Device Simulators | Use a third party accessibility testing service for major releases |
| Performance Testing | via Automated Script | |
| Regression Testing | Automated Test Scripts | |
| Penetration Testing | via Third Party Service | |
| [Insert your own] | | |

Documentation Standards

This section contains standards for documentation creation and maintenance. All development and configuration documents stored in [central location name] and contain the following information. Refer to Simple - Readability for more information.

| Element | Description |
|-------------------|--|
| Solution Overview | Purpose of this solution and its relevance to the business |
| Solution Owners | Business and IT owners for the solution |
| Process | Specific process(es) that are to be automated. |
| Dependencies | Dependencies on any other processes or solutions |
| KPIs | Description of how success will be measured |
| Patterns | Applicable process flow and architecture diagrams for all patterns used in the solution design |
| Decisions | List of Key Design Decisions, along with options considered, tradeoffs and reasoning behind the final decision |
| [Insert your own] | |

Appendix I - Process to Update These Standards

This section contains the process to request and approve updates of this document.

Appendix II - Change Log

This section contains the revision history of this document.

| Date | Description of Change | Change made by |
|-------------------|----------------------------------|----------------|
| 1/1/2022 | Updated approved design patterns | Tom Leddy |
| [Insert your own] | | |