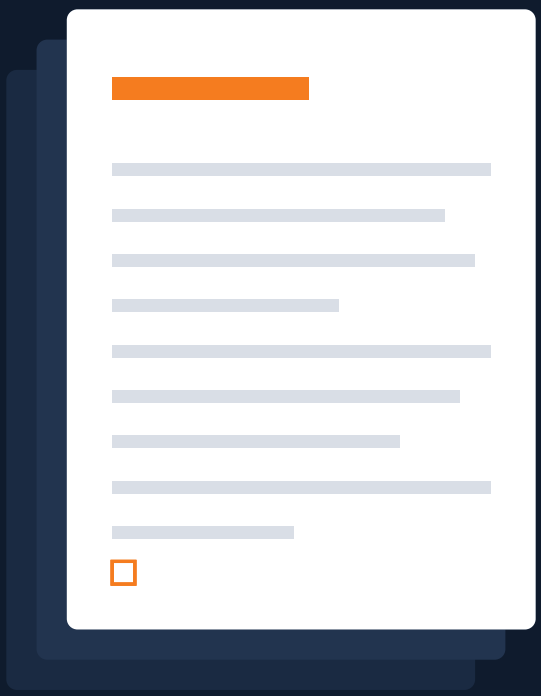
Documentation
Services Lab



FREE TEMPLATE

SOFTWARE DEVELOPMENT

Software Design Document

The detailed design of modules, data, interfaces and logic, ready for implementation.

STAGE

Architecture & design

PRIMARY AUDIENCE

Systems Architects, Lead Engineers, Security Leads

About this template

The Software Design Document (SDD) explains how the requirements will be implemented: module design, data model, interfaces, key algorithms and design decisions. Engineers build from it and reviewers use it to catch problems before coding.

Detail	
Stage	Architecture & design
Primary audience	Systems Architects, Lead Engineers, Security Leads

How to use it

- Replace every *[grey bracketed placeholder]* with your own details.
- Delete the orange **Guidance** boxes and green **Example** boxes before you publish or circulate it.
- Add or remove table rows as needed; keep the section order so readers can find things quickly.

Document Control

System / feature		**SDD version**	
Author		**Reviewers**	
Status		**Date**	

Version	Date	Author	Summary of changes
[1.0]	*[DD/MM/YYYY]*	*[Name]*	*[Initial release]*

01 Introduction

Purpose	
Scope	
Requirements reference	
Design goals	

02 Design Overview

GUIDANCE *Summarise the approach and include a component diagram.*

Component diagram
[Insert component diagram]

03 Module Design

GUIDANCE *Describe each module's responsibility, interfaces and dependencies.*

Module	Responsibility	Public interface	Depends on

04 Data Design

Entities

Entity	Key fields	Relationships	Notes

Data storage

Database	
Indexing strategy	
Retention / archiving	

05 Interface Design

Interface / endpoint	Input	Output	Errors

06 Key Algorithms & Logic

GUIDANCE *Describe non-obvious logic in pseudocode or steps.*

07 Security Design

	Item
☐	*[Authentication / authorisation approach]*
☐	*[Input validation]*
☐	*[Secrets management]*
☐	*[Logging of security events]*
☐	*[Threat model reviewed]*

08 Design Decisions

GUIDANCE *Record important decisions and why (lightweight ADRs).*

Decision	Options considered	Chosen because

09 Design Review Sign-off

Role	Name	Signature	Date
Author			
Lead Engineer			
Security Lead			

Documentation
Services Lab

YOUR TEMPLATE IS READY. YOUR TIME IS LIMITED.

Need this document written, reviewed or formatted for you?

Documentation Services Lab turns your processes, systems and know-how into clear, audit-ready documents your team will actually use. Hand us your notes, recordings or rough drafts and we deliver a finished, on-brand **Software Design Document** and anything else you need.

SOPs & process docs

Standard, checklist, visual and compliance SOPs, process maps, operations manuals.

Technical & API docs

API references, integration guides, manuals, specs and knowledge bases.

Quality & compliance

ISO-ready QMS documents, registers, audit checklists, training records.

Project & construction

Charters, plans, RFIs, submittals, daily reports, closeout packages.

Book a free consultation >

cal.com/documentationservices/inquiry

Visit our website >

documentationserviceslab.com

Free to use and adapt for your own organisation. Remove the orange guidance boxes before publishing.

© Documentation Services Lab