[SCA] 技术方案文档模板

**[Title]{Technical Project Name} Technical Solution**

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Revision history(修改历史)

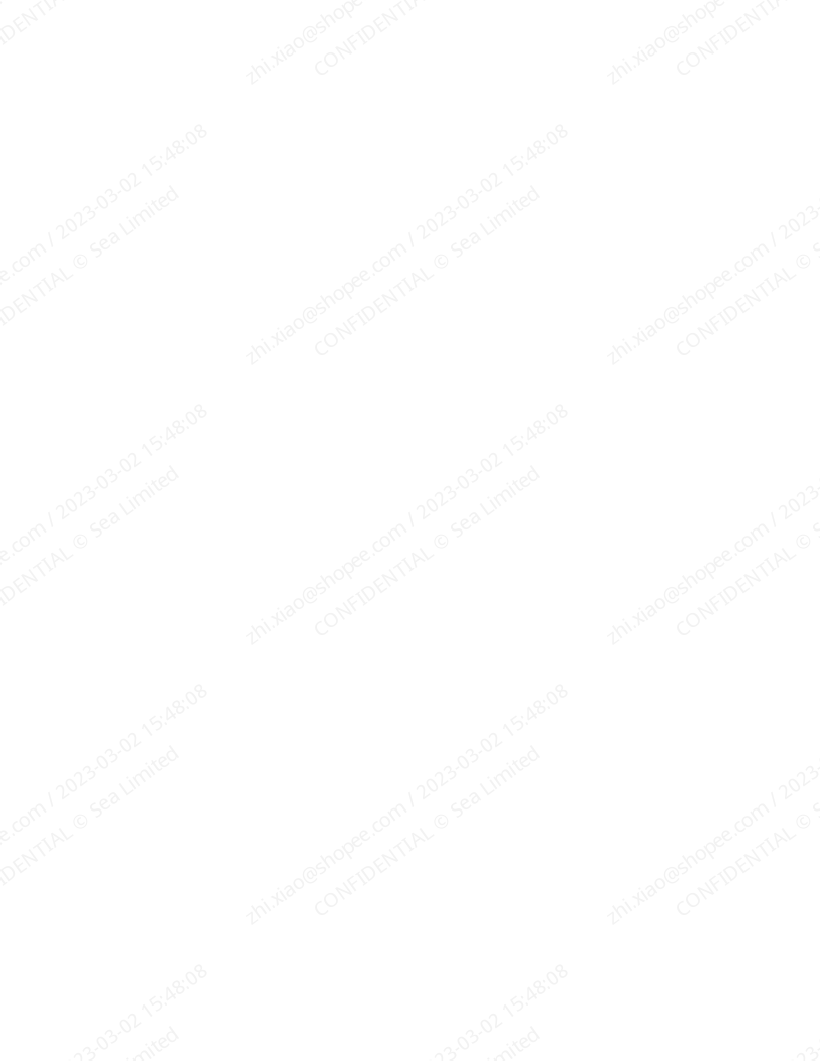
|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Revision date** | **Revisor** | **Revision content** |
| v1 | 2022.02.22 | xxx | xxx |
| v2 | 2022.03.15 | xxx | xxx |

Ownership(责任人)

|  |  |
| --- | --- |
| **Product Manager** | The PIC of Product manager |
| **Project Manager** | The PIC of Project Manager |
| **Native Dev** | The PIC of Android or iOS Dev |
| **RN Dev** | The PIC of React native dev |
| **Server Dev** | The PIC of non-native dev |
| **Designer** | The PIC of designer |
| **QA** | The PIC of QA |

Resources(资源)

|  |  |
| --- | --- |
| **PRD** | The link of PRD(s), created by product manager |
| **Figma** | The link of UI design |
| **Transify** | The link of transify in [https://transify.seagroup.com](https://transify.seagroup.com/) |
| **Git Repo(Optional)** | The git repo or branch for this project if necessary to indicate |
| **Dependent Service Doc(Optional)** | SDK integration doc, official guideline, etc. |
| **Project Schedule Page (Optional)** | Usually created by project manager, timeline of the document |
| **Feasibility Study Doc (Optional)** | Usually feasibility study is ahead of PRD. |



Summary(摘要)

# Background(背景)

Here to describe the background for this tech design

# Goal(目标)

Here to describe the goal you want to achieve

# Specifications & Conventions(规格与约定) (optional)

Here to describe the related specifications and conventions

# Abbreviations(缩写) (optional)

Here to describe the related abbreviations, eg.

|  |  |  |
| --- | --- | --- |
| **ABB** | **Full name** | **Description** |
| FM | First Mile | 从发件端到中转仓之间的物流服务商类型  The type of logistics service provider from sellers’ warehouses to the transit warehouse |

Overall Design(总体设计)

对本方案给出整体架构图 或者与 当前方案相关的部分架构图，包括主要模块、数据流、上下文关系等；

如果是部分变动，应使用文字描述或者图形标识突出有变化的地方，以及标识出在App架构分层中的位置等。

This solution provides the overall architecture diagram or the related part architecture diagram, including main modules, data flow, context relations, etc.

If it is a partial change, a text description or graphic identification should be used to highlight the changes, and mark the position in the App architecture layer.

# Industry research & benchmarking(行业调研&对标)

industry Implementation (行业的实现方案)

Implementation of Architecture Diagram and its description

# Brand new(全新设计)

Implementation

Implementation of Architecture Diagram and its description

# Improvement(revamp/refactor) for existing feature(对现有系统的提升)

Current

Current Architecture Diagram and its description

Improvement

Improvement Architecture Diagram and its description

Detailed Design(详细设计)

对本方案核心模块功能和交互实现的详细设计，可包括：模块间交互的时序图、状态图、子模块功能详细说明、代码组织形式（SDK、Framework、 source、jar）、数据流、状态管理、兼容性、性能、异常处理、安全防护、扩展性

The detailed design of the core module functions and interactive implementation of this solution, includes: sequence diagram of interaction between modules, state diagram, detailed description of sub-module functions, code organization(SDK, Framework, Source, JAR), data flow, state management, compatibility, performance, exception handling, security protection, expansibility, etc.

# Brand new(全新设计)

## [Implementation] Class Diagram/Sequence Diagram/State Diagram

Implementation of design better in UML charts

# Improvement(revamp/refactor) for existing feature(对现有系统的提升)

## [Current] Class Diagram/Sequence Diagram/State Diagram

Current design better in UML charts

## [Improvement] Class Diagram/Sequence Diagram/State Diagram

Improvement design better in UML charts

Interface Design(接口设计)

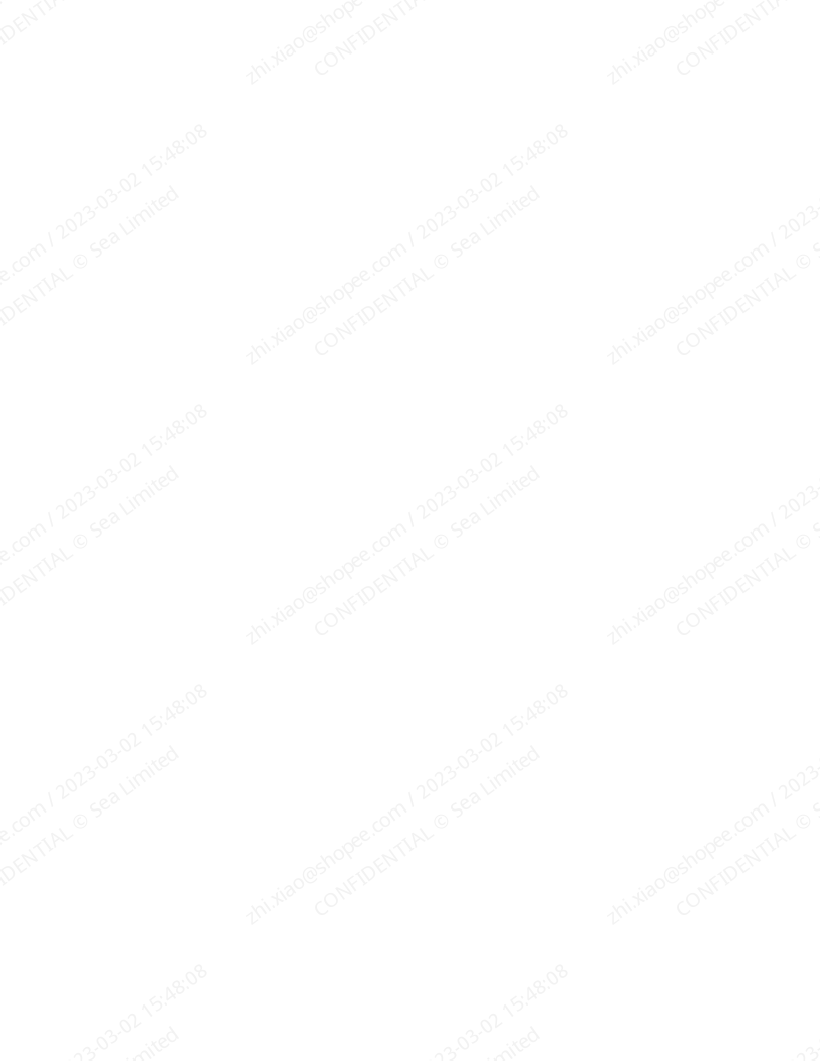
本方案对外提供的接口相关信息，如接口名称、协议、参数，及注意事项等，如 1、对内提供的接口描述，包括名称、类型（API、路由schema）、各参数（类型、描述、限制）等；

2、内部接口需要给出鉴权机制和其他安全性考虑；（如不涉及可不写）

3、给出对外接口描述，包括名称、地址或URL、类型（HTTP/HTTPS等）、协议内容、各参数（类型、描述、限制）等；

4、对外接口需要给出鉴权机制和其他安全性考虑；（如不涉及可不写）

Interface information provided by this solution, such as interface name, protocol, parameters, and precautions, as follows

1、Provide the internal interface description, including name, type (API, route schema), and parameters (type, description, and limit), etc. 2、Internal interfaces need to be considered authentication mechanism and other security issues. (Do not write if not involved)

3、Provide the external interface description, including name, address OR URL, type (such as HTTP or HTTPS), protocol content, and parameters (type, description, and limit), etc.

4、External interfaces need to be considered authentication mechanism and other security issues. (Do not write if not involved)

Eg.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| API description | /api/mobile/check\_status | | | |
| API quality | Tps：1k，response time：5ms | | | |
| Call mode | POST | | | |
| Input | Parameter name | Requisite | Type | Remark |
|  | channel\_id | Y | int |  |
|  | client\_id | Y | int |  |
|  | client\_sn | Y | string |  |
| Output | Response name | Requisite | Type | Remark |

接口设计要求安全可靠、调用清晰，HTTP接口统一使用[Yapi](http://apidoc.i.ssc.shopeemobile.com/)，可以直接给出链接附在此处；

The interface design must be secure, reliable and clear, [Yapi](http://apidoc.i.ssc.shopeemobile.com/) would be used throughout for HTTP, you can directly attach here the link.

Storage Design(存储设计) (Optional)

本方案存储相关信息，可包括： 1、如涉及持久化要给出持久化方案，文件存储介质、目录组织形式、数据格式、保存周期与清理机制等；

2、如果涉及数据库存储，需要给出数据库表定义、字段定义等； The stored related information for this solution, include:

1、If persistence is involved, the persistence solution should be given, file storage medium, directory organization, data format, storage period and cleaning mechanism, etc.

2、If database storage is involved, you need to provide database table definitions, field definitions, and so on.

Data track & Monitoring(数据监控)

The data you wanna track in Firebase or Lumos or any other data platform

Others (Optional)

描述其它关注点的设计点，例如安全、兼容、依赖等

Describe the design points of other concerns, such as security, compatibility, dependencies, and so on

# Security or privacy risks checklist(安全或隐私风险确认项)

Checklist for the risks according your business, might be privacy or security and so on

# Solution for compatibility with older versions (according to Feasibility study)(对旧版本的兼容性)

How you solve the compatibility problems, after this design is implemented, old version can still work, and future change should not cause great

# Dependency of third party SDKs(第三方依赖)

List of the sdks you involved in this design Or the link to [SDK Integration]Feasibility Study

Legacy & Risk Appraisal(遗留问题与风险评估) (Optional)

本方案遗留问题和风险评估可包括： 1、本次方案受限于时间、人力、外部因素等原因，某一部分未充分设计或者实现，可能带来的影响，以及下阶段的改进计划

2、受限于外部依赖限制、硬件资源、网络等不可控条件，存在的运行和运营风险 Residual issues and risk assessment of the solution, include:

1、This solution is limited by time, manpower, external factors or other reasons, a section that is not adequately designed or implemented, the possible impact, and the improvement plan for the next stage

2、Limited by external dependencies, uncontrollable conditions such as hardware resources or networks and so on, existing service and operational risks

Appendix(附录)

本方案的一些附带内容，例如引用的文档链接、技术分析说明等

Some incidental content of this solution, such as the referenced document links, technical analysis notes, and so on

MileStones(里程碑与排期)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Milestone Objective** | **Owner** | **Timeline** | **Risks** | **Comments** |
| 1 |  |  | ETA Test : ETA UAT :  ETA Live : |  |  |
| 2 |  |  | ETA Test : ETA UAT :  ETA Live : |  |  |
| ... |  |  |  |  |  |

Tickets

|  |  |  |
| --- | --- | --- |
| **Task content** | **PIC** | **JIRA Ticket** |
| 1 sentence summary of this sub task content, can be the title of JIRA ticket | Android dev name | [SPFE-47978](https://jira.shopee.io/browse/SPFE-47978) - [Android]Template Task **WAITING** |