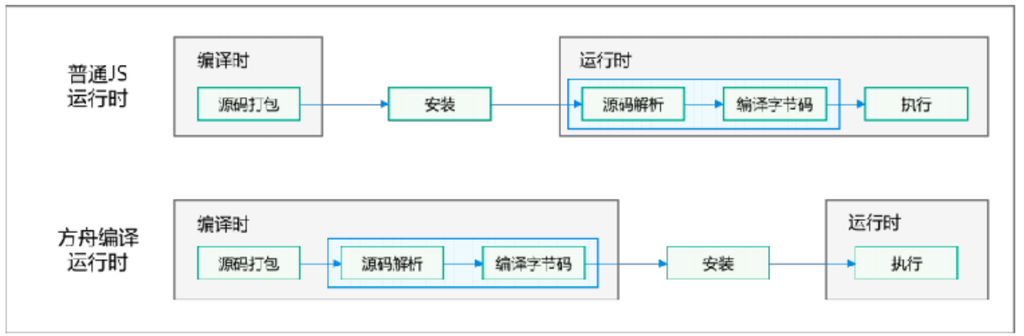
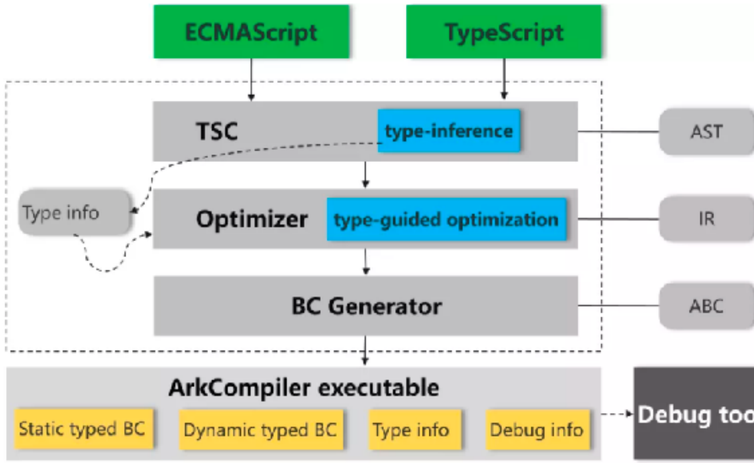
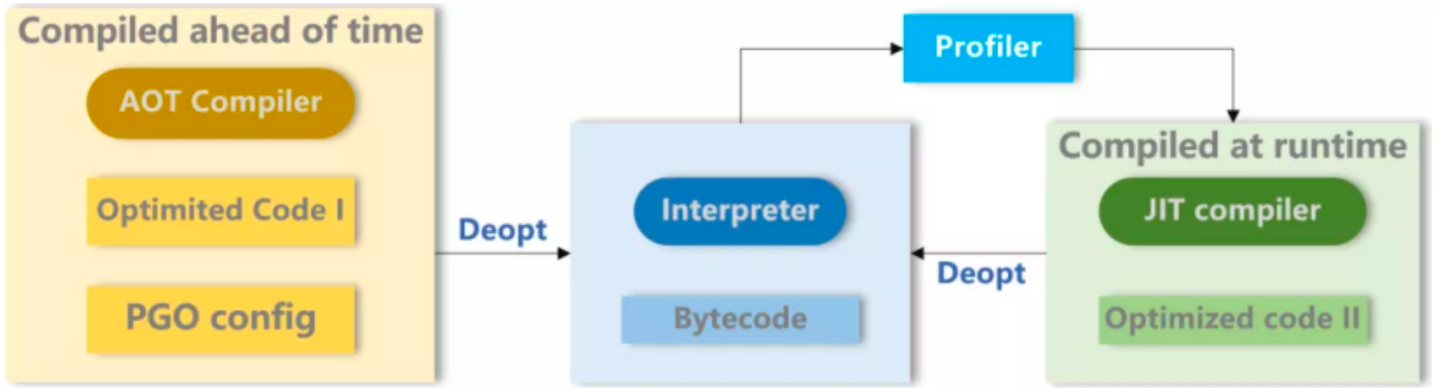
复习

ArkCompiler和ArkRuntime

- 方舟编译运行时
- 类型推导
- AOT和JIT区别

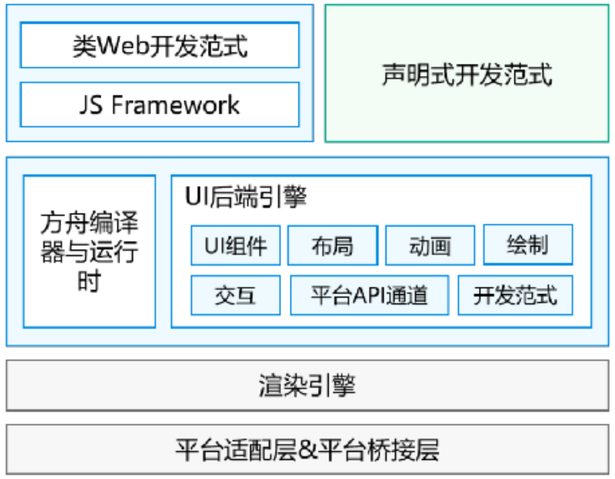


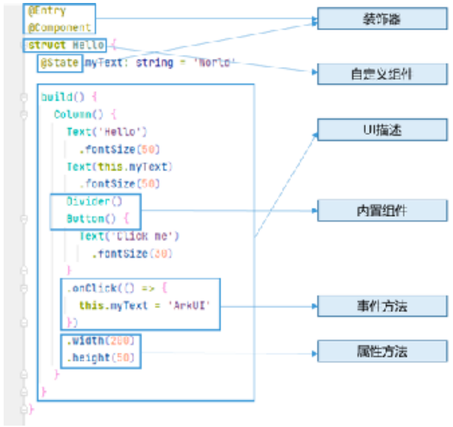


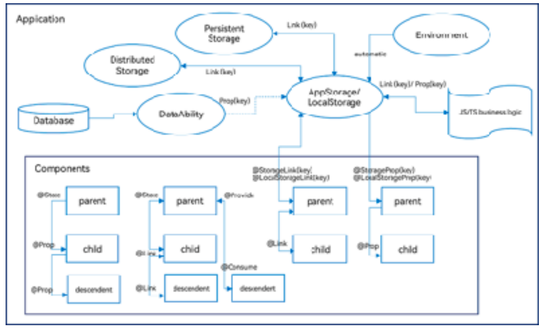


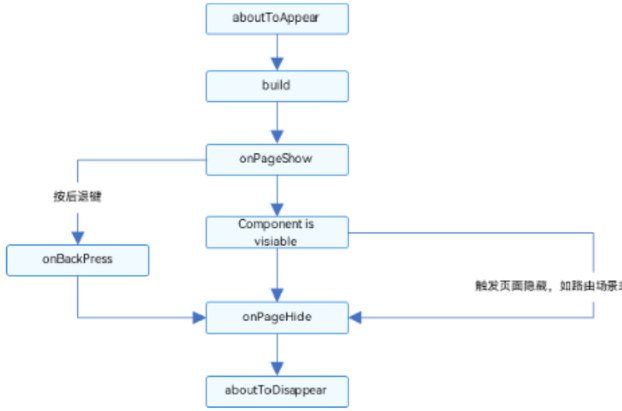
ArkUI

- ArkUI框架
- UI示例
- 页面生命周期、组件生命周
- 状态管理
- 渲染控制
- 布局结构



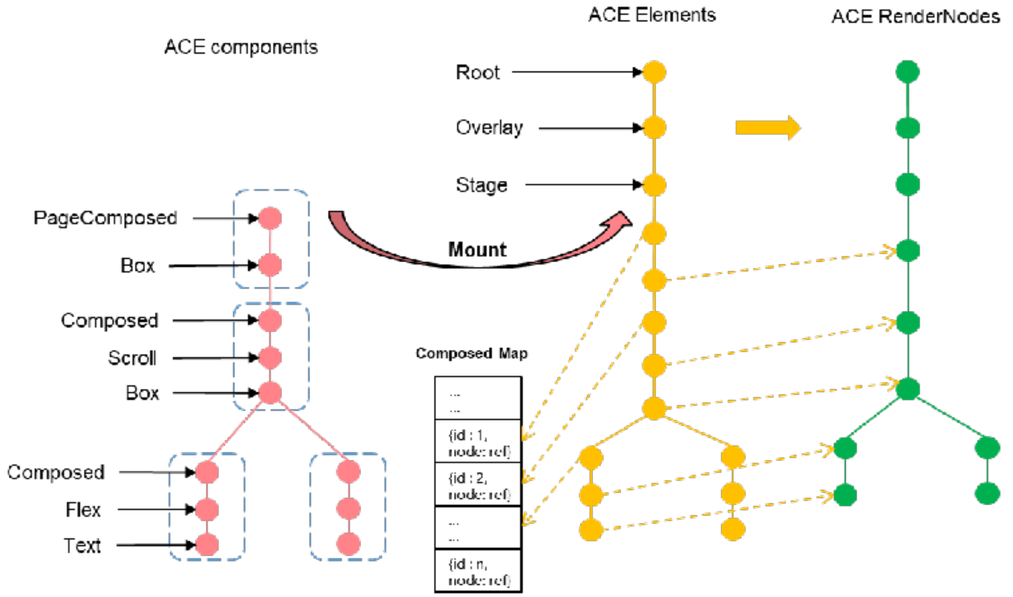


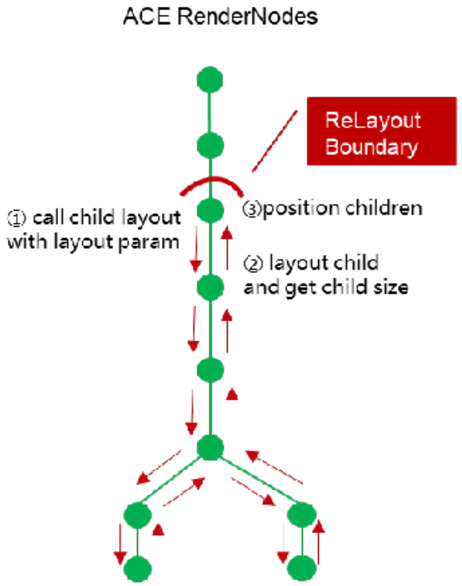


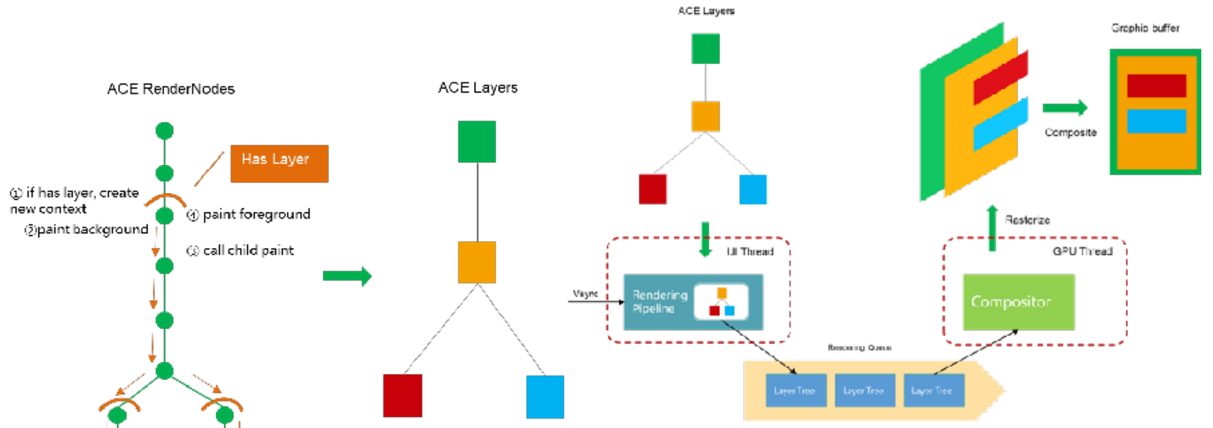


ArkUI

- UI渲染
  - Component树、Element树、Render树
  - 布局的步骤
  - 绘制
  - 光栅化合成机制







ArkUI

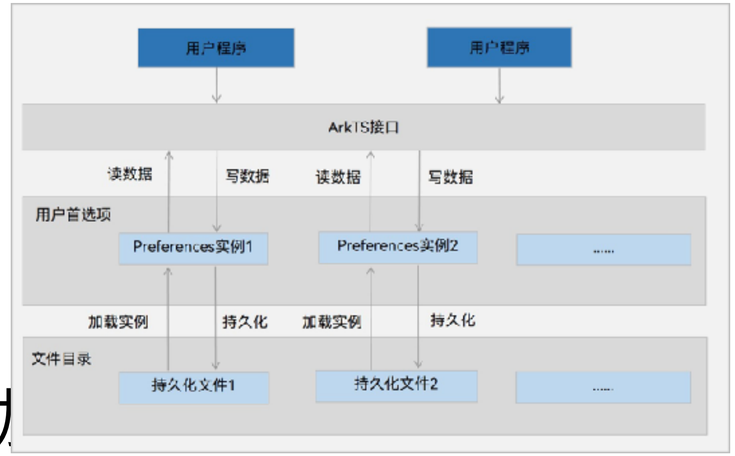
- 大前端框架演进
- React、Flutter、ArkUI对比

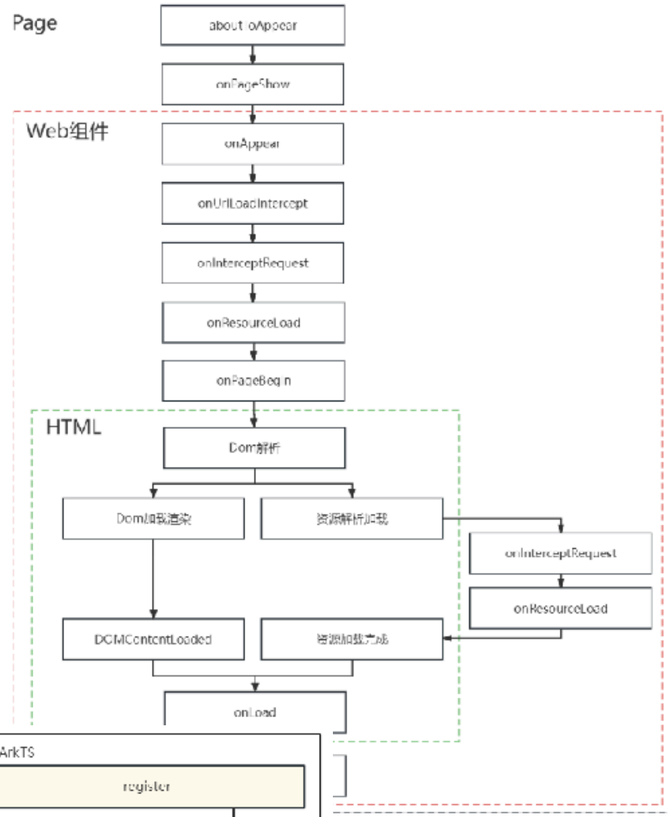
需求分析

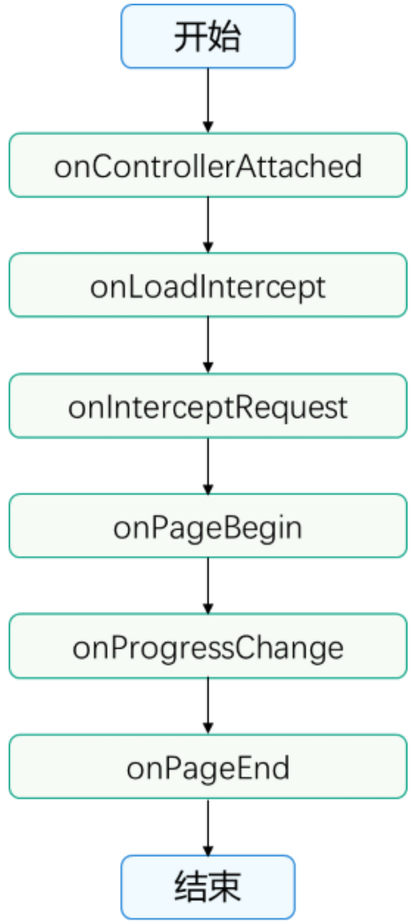
- 层次性
- 涉众
- 需求获取
- 关注点
- 需求的组织

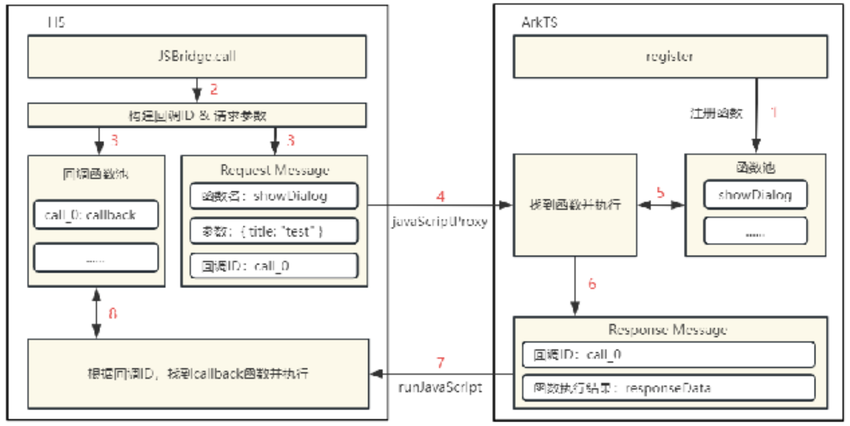
AbilityKit、Network Kit 、ArkData和ArkWeb

- 启动UIAbility
- 冷启动和热启动
- 用户首选项原理
- Web组件生命周期
- H5页面和ArkTS交互



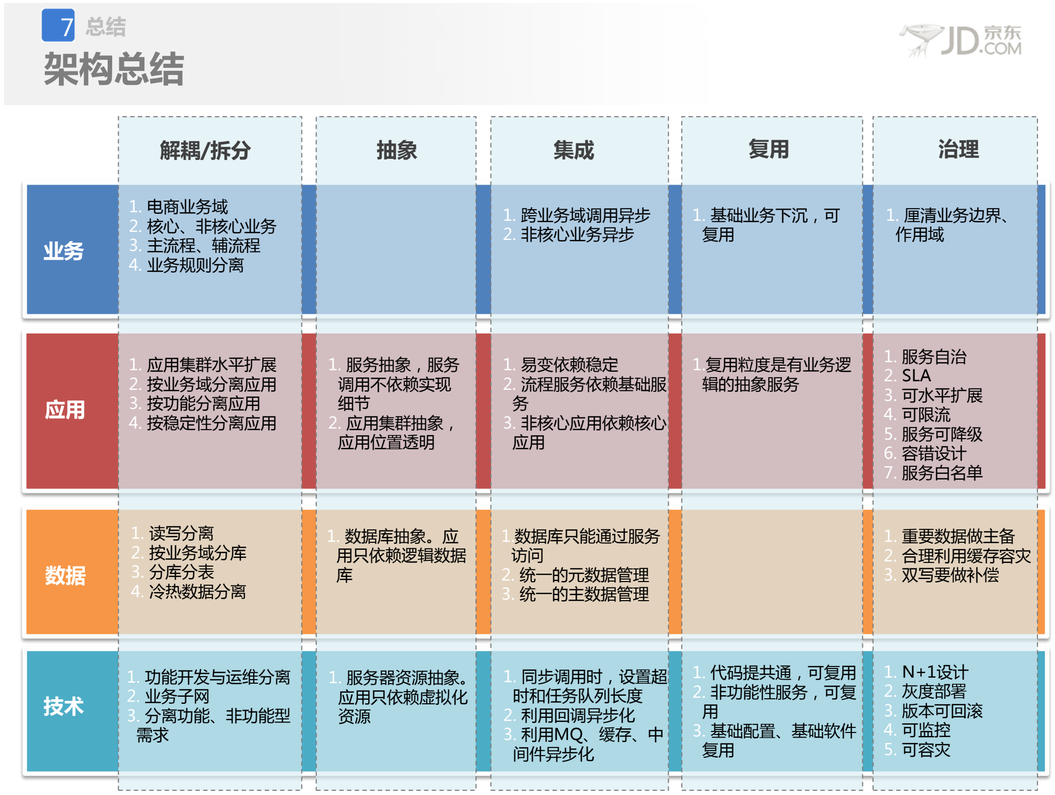






架构设计视角

- 业务、应用、数据、技术
- 整体横向分层抽象，局部纵向贯穿分解

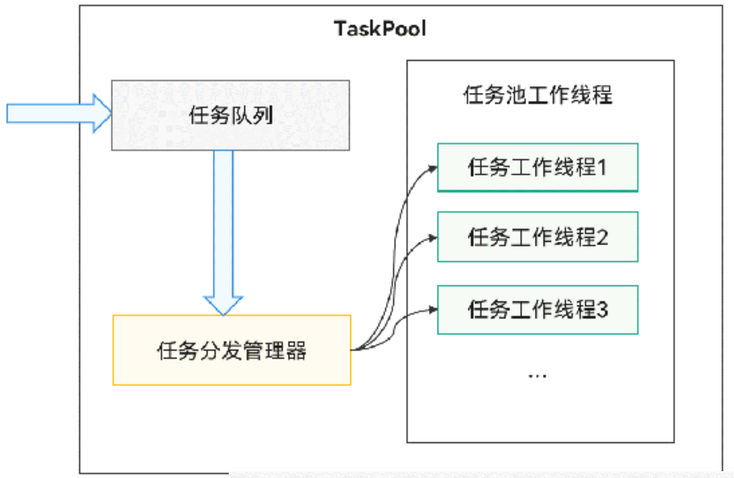


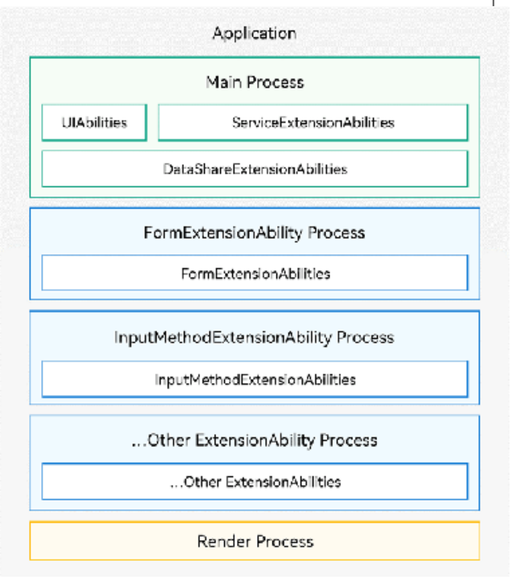
高可用 高并发

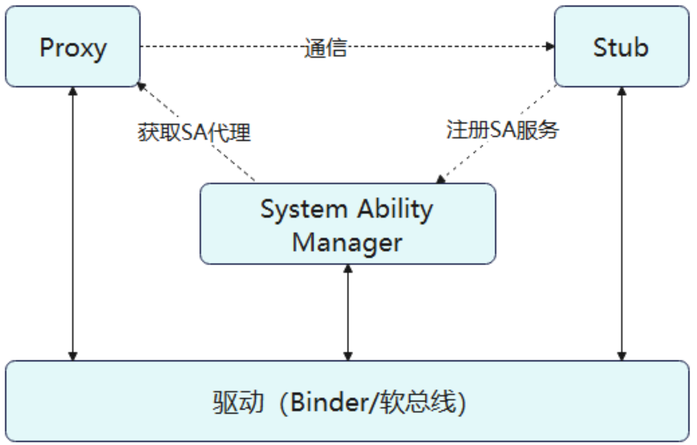
- 大型网站架构演化历程
- 高可用
  - 负载均衡与反向代理
  - 隔离
  - 限流
  - 降级
  - 超时与重试机制
  - 回滚
  - 压测和预案
- 高并发
  - 应用级缓存
  - HTTP缓存
  - 连接池
  - 异步并发
  - 扩容
  - 队列

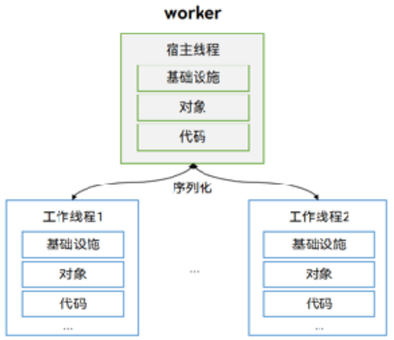
进程与线程

- 异步并发 (Promise和async/await)
- TaskPool机制和Worker机制
- 进程模型
- IPC机制







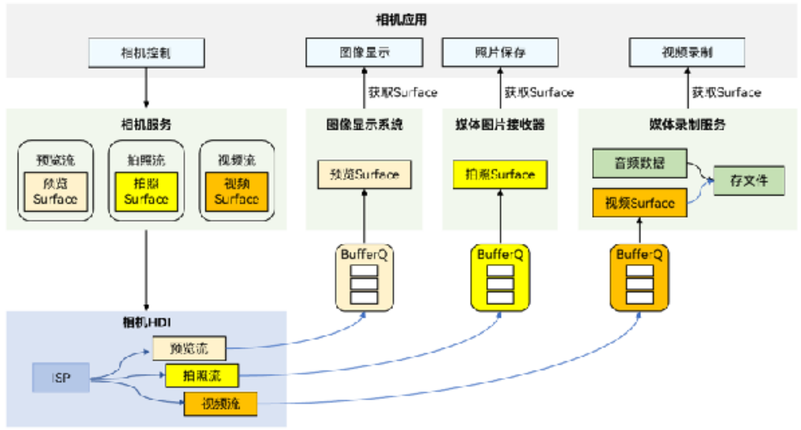


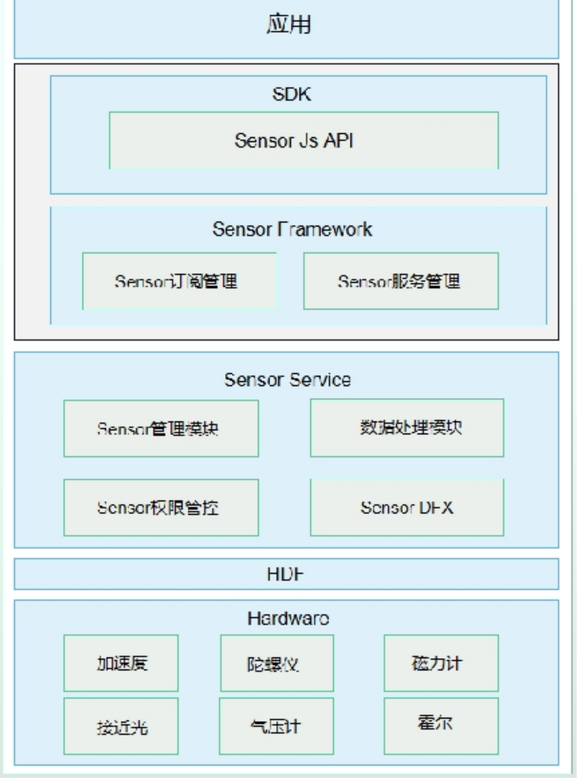
关注点

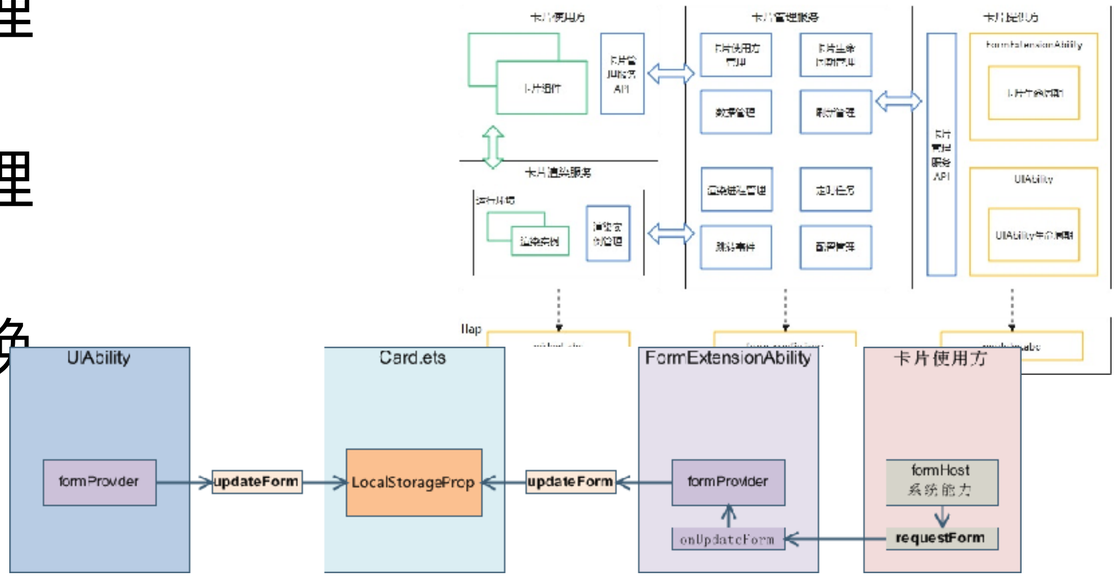
- 秒杀系统
- 可视化全链路日志追踪

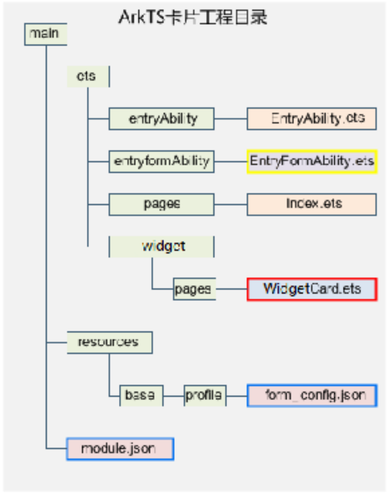
系统工具库

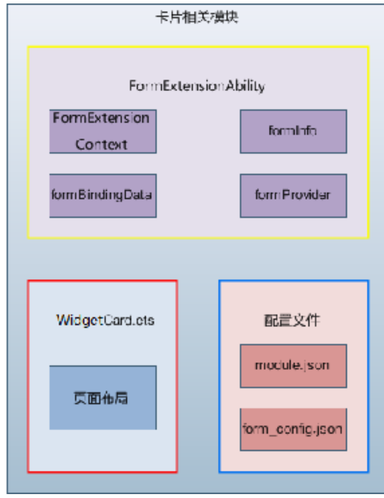
- 相机开发服务
- 传感器运作机制
- 卡片实现原理
- 卡片渲染原理
- 卡片数据交换







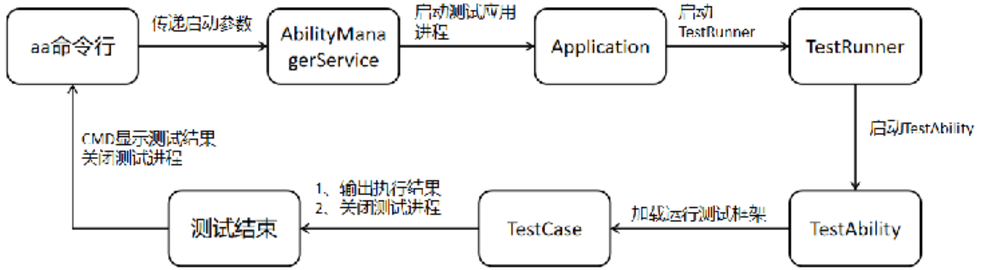




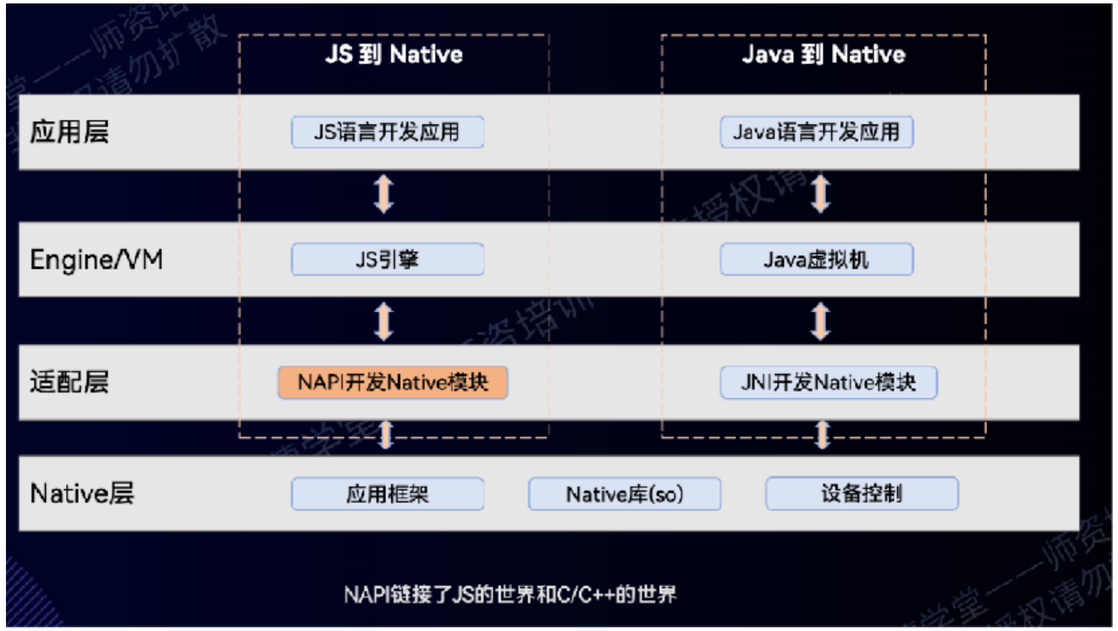
从微服务到云原生

- 微服务架构
- Docker、K8s、Istio架构
- Serverless
- 云原生
- AI原生

高级特性

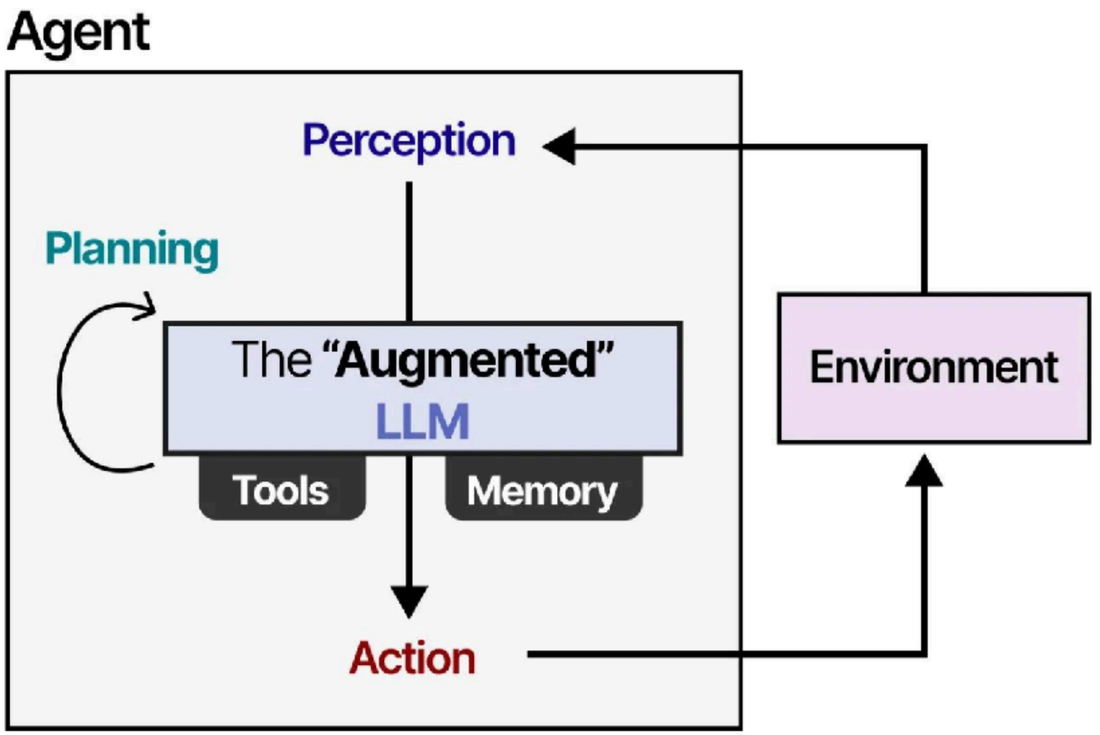


- 脚本基础流程运行图
- UI测试用例
- NAPI对比JNI



智能体

- 智能体的组成
- Planning
  - Chain-of-Thoughts
  - React
  - Reflection
  - Self-Refine
  - Subgoal decomposition
- RAG
- MCP



Timeless的东西

- 需求的涌现
  - spec
- 现实的复杂度
  - 层次性skill+知识
- 不确定性问题
  - 各司其职
  - 规模化
  - 检查智能体