清晰的目录结构

```
 1  horse
 2   |-- horse-bussiness 业务模块目录
 3       |-- mall-xx
 4       |-- ...
 5   |-- horse--framework 框架模块目录
 6       |-- horse-framework-core          核心代码
 7       |-- horse-framework-dependencies依赖管理
 8       |-- horse-framework-starters    组件模块目录
 9           |-- horse-framework-starter-web    web组件
10           |-- horse-framework-starter-mysql  mysql组件
11           |-- ...
12   |-- horse--support   支撑模块目录
13       |-- horse-gateway 网关
14       |-- horse-user     用户中台
15       |-- ...
16
```

依赖统一管理

horse-framework-dependencies模块中只有一个pom文件，它负责管理框架中所有用到的依赖版本。除了该模块的pom文件，其他框架模块中不会出现任何版本号的配置，方便统一维护。（如下是pom文件）

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xmlns="http://maven.apache.org/POM/4.0.0"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.

    <modelVersion>4.0.0</modelVersion>
    <packaging>pom</packaging>
    <groupId>com.msb.cloud</groupId>
    <artifactId>horse-framework-dependencies</artifactId>
    <version>1.0-SNAPSHOT</version>
    <properties>
        <spring-boot.version>2.5.6</spring-boot.version>
        <spring-cloud.version>2020.0.4</spring-cloud.version>
        <spring-cloud-alibaba.version>2.2.1.RELEASE</spring-cloud-alibaba.ve
        <mysql.version>6.0.6</mysql.version>
        <xxl-job.version>2.3.0</xxl-job.version>
        <druid.version>1.2.6</druid.version>
        <redisson.version>3.16.7</redisson.version>
        <jwt.version>0.9.1</jwt.version>
        <!--实用插件-->
        <knife4j.version>3.0.3</knife4j.version>
        <!--开发工具-->
        <commons.lang3.version>3.4</commons.lang3.version>
        <lombok.version>1.18.22</lombok.version>
        <easyexcel.version>2.1.6</easyexcel.version>
        <hibernate.validator.version>6.0.7.Final</hibernate.validator.versio
        <mapstruct.version>1.4.2.Final</mapstruct.version>
        <swagger-annotations.version>1.5.22</swagger-annotations.version>
```

其他模块只要自身或者父模块引用了horse-framework-dependencies，则依赖包时可省略版本（如下是horse-framework-starter-mysql模块的pom文件）

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.
    <parent>
        <artifactId>horse-framework-starters</artifactId>
        <groupId>com.msb.cloud</groupId>
        <version>1.0-SNAPSHOT</version>
    </parent>
    <modelVersion>4.0.0</modelVersion>

    <artifactId>horse-framework-starter-mysql</artifactId>

    <properties>
        <maven.compiler.source>8</maven.compiler.source>
        <maven.compiler.target>8</maven.compiler.target>
    </properties>

    <dependencies>
        <dependency>
            <groupId>mysql</groupId>
            <artifactId>mysql-connector-java</artifactId>
        </dependency>
        <!--mybatis plus-->
        <dependency>
            <groupId>com.baomidou</groupId>
            <artifactId>mybatis-plus-boot-starter</artifactId>
        </dependency>
```

可插拔式组件

框架中的horse-framework-starters模块下有很多的starter，如horse-framework-starter-web，horse-framework-starter-mysql等，这些模块中已经做好了相应的依赖导入、配置优化、封装实用工具等操作。业务模块按需导入即可快速开始开发。

如某业务模块是web服务，且需要使用mysql、redis，那么pom文件如下：

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xmlns="http://maven.apache.org/POM/4.0.0"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.
    <parent>
        <artifactId>horse-demo</artifactId>
        <groupId>com.msb.cloud</groupId>
        <version>1.0-SNAPSHOT</version>
    </parent>
    <modelVersion>4.0.0</modelVersion>

    <artifactId>horse-demo-service</artifactId>

    <dependencies>
        <dependency>
            <groupId>com.msb.cloud</groupId>
            <artifactId>horse-framework-starter-web</artifactId>
        </dependency>
        <dependency>
            <groupId>com.msb.cloud</groupId>
            <artifactId>horse-framework-starter-redis</artifactId>
        </dependency>
        <dependency>
            <groupId>com.msb.cloud</groupId>
            <artifactId>horse-framework-starter-mysql</artifactId>
        </dependency>
    </dependencies>
```