# The UOR Repository Structure

UOR Foundation

TBD

**Abstract**

The UOR Foundation has outlined the following repository structure and hierarchy as the Universal Template for UOR repositories. The *intention* is for the orderly development and publication of the **UOR Kernel**, the **UOR Operating System**, and the **UOR Applications** that make up its associated modules, utilities, applications, and platform of the **UOR Computer**. The *aim* is to maintain consistency, scalability, and clarity across all repositories while enabling creative collaboration for evolution and governance the UOR Computer.

Following are the core templates for the UOR Foundation & UOR Computer. The unique function or capability of any file or code will determine the "type" of repository.

UOR Foundation Core Templates

1. UOR Foundation Repository
2. UOR Kernel Repository
3. UOR Utilities Repository
4. UOR Operating System Repository
5. UOR Applications Repository
6. UOR Platform Repository

## 1 UOR Foundation Repository

**Purpose:** The UOR Foundation repository serves as the authoritative source for core foundational documents that direct and guide the Foundation. This repository maintains the stability and integrity allowing for the creative development of the UOR Foundation & it's source code.

```
uor-foundation/
 docs/
    README.md        # Overview of the Foundation's purpose
    policies/        # Stable, guiding policy documents
       governance.md # Governance structure
       funding.md   # Funding policies
       contributions.md # Contribution guidelines
    instructions/    # Detailed operational instructions
    history/         # Historical records and archives
    LICENSE          # Licensing and legal documents
 templates/           # Templates for policy or instructional documents
 meta/                # Metadata about the Foundation's operations
 .github/
    workflows/       # CI/CD workflows for maintaining documentation
 .gitignore
 secure/              # Secure, access-controlled storage for sensitive documents
```

## 2 UOR Kernel Repository

**Purpose:** Maintains and develops the UOR kernel, providing core functionality and system calls for the operating system and dependent repositories.

```
uor-kernel/
 src/
    kernel/          # Core kernel code
    syscalls/        # System call definitions
    arch/            # Architecture-specific code
 docs/
    README.md        # Overview of the kernel
    API.md           # Syscall and kernel API descriptions
    CONTRIBUTING.md  # Contribution guidelines
    LICENSE          # Licensing information
 tests/
    unit/            # Unit tests for syscalls
    integration/     # Kernel integration tests
    benchmarks/      # Performance benchmarks
 configs/
    default.config   # Default kernel configuration
 .github/
    workflows/       # CI/CD workflows
 templates/
    module_template/ # Template for kernel modules
 .gitignore
 meta/
     design_docs/     # Kernel design documents
```

# 3 UOR OS Modules Repository

**Purpose:** Contains kernel extensions, drivers, or subsystems that integrate directly with the kernel.

```
uor-os-modules/
 src/
    drivers/         # Device drivers
    filesystems/     # File system modules
    networking/      # Networking stack
 docs/
    module_api.md    # API documentation for modules
    CONTRIBUTING.md  # Contribution guidelines
    LICENSE
 tests/
    unit/            # Unit tests for modules
    integration/     # Kernel-module integration tests
 .github/
     workflows/       # CI pipeline for module testing
```

# 4 UOR OS Utilities Repository

**Purpose:** Stores core OS utilities such as commands and libraries.

```
uor-os-utilities/
 src/
    commands/        # Utility commands (e.g., fetch, pull)
    libraries/       # Shared utility libraries
 docs/
    command_usage.md # Command usage instructions
    CONTRIBUTING.md
    LICENSE
 tests/
 .github/
     workflows/
```

# 5 UOR Application Repository

**Purpose:** Develops standalone applications that run on the kernel.

```
uor-app-<name>/
 src/
    gui/             # Graphical user interface code
    backend/         # Application logic
    syscalls/        # Interfacing with the UOR kernel
 docs/
    user_guide.md    # How to use the application
    CONTRIBUTING.md
    LICENSE
 tests/
    functional/      # Tests for user interaction
 .github/
     workflows/
```

# 6 UOR Platform Repository

**Purpose:** Serves as the hub for integrating and deploying applications built for the UOR OS.

```
uor-platform/
 src/
    sdk/             # Developer SDKs for app creation
    deployment/      # Tools for packaging and deploying apps
 docs/
    developer_guide.md
    platform_api.md
    LICENSE
 tests/
 .github/
     workflows/
```

# Summary

The proposed repository structure is designed to ensure:

- **Consistency:** A unified template for all repositories.
- **Scalability:** Clear guidelines for creating new repositories.
- **Governance:** A hierarchy where the UOR kernel repository acts as the parent, defining standards and providing resources for child repositories.
- **Flexibility:** Repositories can adapt templates based on their specific needs while maintaining alignment with organizational goals.
- **Authority:** The UOR Foundation repository maintains the stability and guiding principles for all organizational operations and records.

This structure provides a solid foundation for managing the development and evolution of the UOR kernel, its ecosystem, and associated applications.