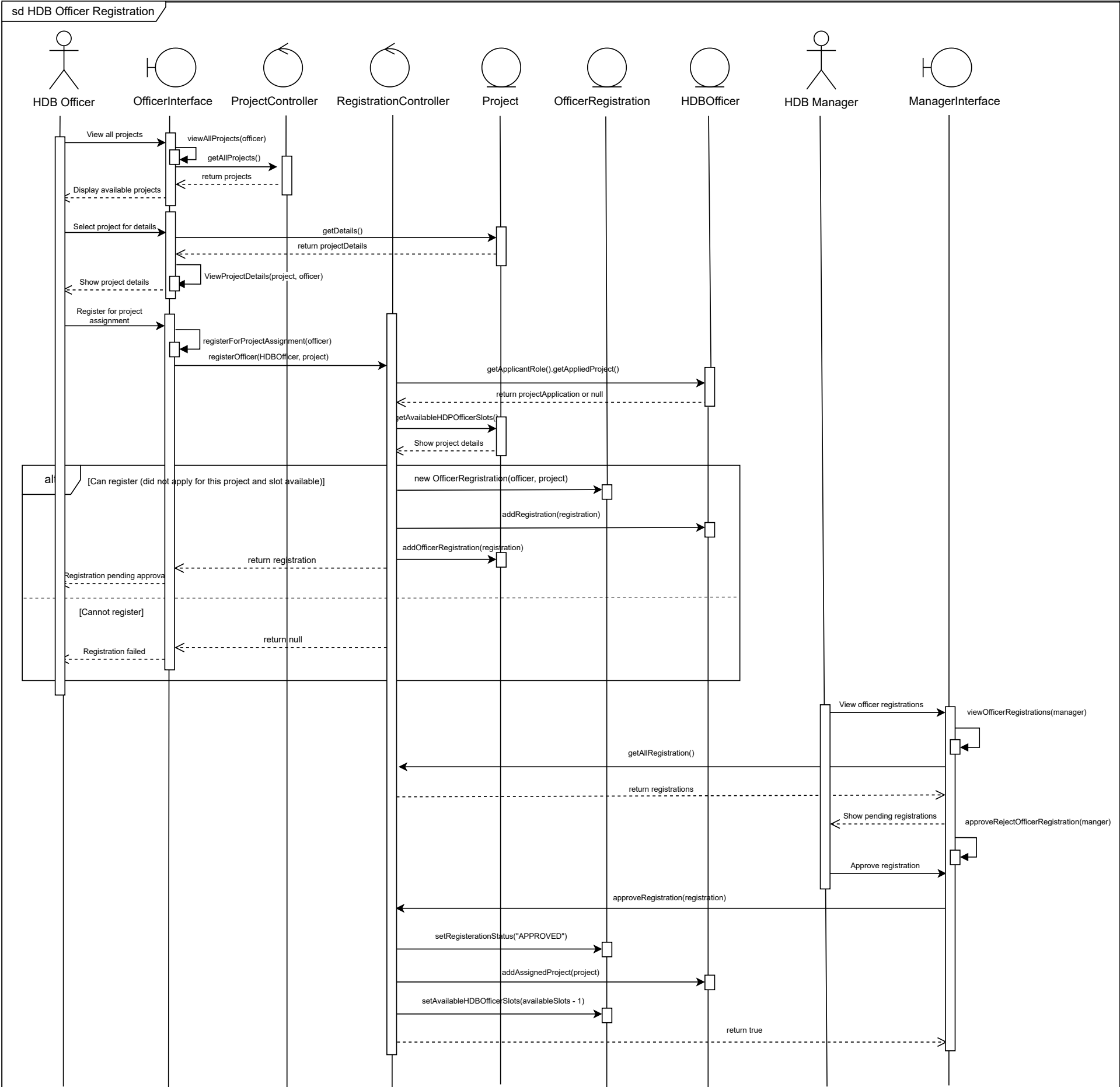


We selected the officer project application sequence because it showcases our system's role composition design. By enabling HDB Officers to act as applicants when applying for BTO projects, we implemented dual-role functionality without using multiple inheritance. This sequence exercises critical business rules including date overlap checks, conflict of interest verification, and eligibility validation. The diagram illustrates how the system enforces these constraints while maintaining separation between boundary, control, and entity classes. The composition relationship between HDBOfficer and Applicant allows code reuse without duplication, demonstrating how proper OO design efficiently addresses complex domain requirements.



We selected the officer project registration sequence because it models a complex internal process with multiple system checks and approval workflows. Unlike typical user interactions, this sequence demonstrates how officers register to manage projects, requiring verification of existing registrations, slot availability, and manager approval. The diagram illustrates the transitions between different actor roles (officer and manager) while showing how control logic is properly distributed across the RegistrationController, Project, and HDBOfficer classes. By including conditional logic and status management, this sequence validates our system's ability to enforce business rules and constraints, ensuring that the registration process accurately reflects real-world requirements and maintains proper separation of concerns.