# CIT 111 - Wild Wood Scenario

## Statement of Work

### **HISTORY**

Wild Wood Apartments owns 20 different apartment complexes in Washington, Oregon, California, and Idaho. Each apartment complex contains anywhere from 10 to 60 separate apartments, of varying sizes. All apartments are leased with a six month or year lease.

It is the company's practice to hire one of the tenants to manage each apartment complex. As managers they need to admit new tenants to the building, collect rents from existing tenants, and close out leases. The manager also needs to maintain the apartments conducting any repairs, replacements, or renovations. These can be billed back to the parent company. For acting as manager, the tenant gets free rent and a stipend. The stipend varies depending on the size of the apartment building.

Each manager is expected to send a report to the Wild Wood Apartments company headquarters in San Francisco every quarter. This report summarizes the occupancy rate, the total revenues in rent, the total expenses in maintenance and repairs, etc. Currently managers fill out a paper form and mail it back to headquarters. Many apartment managers have complained that preparing this report is a very difficult and time-consuming process. Also, the managers at corporate headquarters have expressed concerns about the accuracy and verifiability of the reports.

To allay these concerns and to improve the ease and efficiency with which the apartment managers conduct their daily business, the company is proposing the development of a centralized database that can be used by the managers to track the daily business of their apartment building and to prepare their reports.

#### **SCOPE**

The Wild Wood Apartment database will provide a centralized repository for all the apartment management data from the companies 20 apartment buildings. The database will track each of its buildings, the state (occupied or unoccupied) of each apartment, leases, tenants, and rental payments. It will also track maintenance requests and expenses. In addition, the database will produce quarterly and annual reports summarizing occupancy rates, revenues in rent, and repair and maintenance costs.

#### **OBJECTIVES**

- Centralize management of apartments and rents
- Gather apartment, tenant, lease and rental payment information
- Better recording of maintenance expenses and costs
- Improve the accuracy and ease of creating quarterly reports

#### **TASKS AND TIMELINE**

**1. Gathering Data:** This task will consist of several interviews, questionnaires and observations. Time allotted 3 weeks.

**Deliverable:** A list of scheduled interviews and observations, text of the questionnaires

**2. Analyzing Data:** The data gathered will be analyzed to determine business rules and preliminary data modeling. Time allotted 2 weeks.

**Deliverable:** List of business rules to be reviewed, basic entities and attributes

**3. Normalization:** The data model will be completed with entities and relationships normalized. Time allotted 1 week.

**Deliverables**: Entity Relation Diagram for Review

**4. Building the physical database:** The data model will be translated to the Relational Database Management system. Tables, Columns with specific data types and Relational and other constraints created. Time allotted 3 days.

**Deliverables:** The Schema of the database for review

**5. Testing and security:** Sample data will be entered and each of the business rules and requirements will be tested. General database security and security related to business rules will also be tested. Time allotted 3 weeks.

**Deliverables**: Documented test results

**6. Database completion and installation:** Final changes and corrections are made. Sample data will be removed and the database installed on a server. Final testing for server access and connections. Time allotted 2 weeks.

**Deliverables:** The working database

Total time between beginning of project and end: 11 weeks, 3 days.