ECE 458
Development Guide
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Project Overview: Our project is an inventory tracking system for the ECE department built on Django with a Postgresql database. The application is running on an Apache webserver on an Ubuntu virtual machine provided by Duke OIT.

Link: https://colab-sbx-379.oit.duke.edu/

High-Level Design: Our project uses the standard Django project architecture, with a few main files.
- models.py: Specifies the persistent models which Django translates into Postgresql tables
- views.py: A set of Python functions that take Web requests and return Web responses
- settings.py: Specifies settings/configuration for the project
- urls.py: The URL declarations for the project; a "table of contents" of the site
- admin.py: Specifies the models and fields that the admin user has control over

These files, in addition to html templates for the different pages, control the behavior of the application.
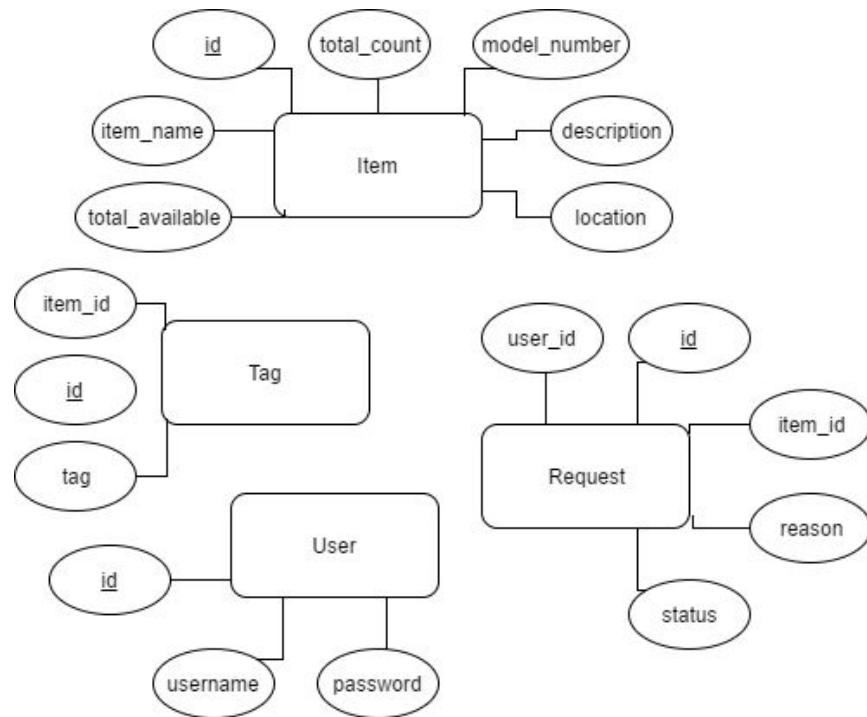
Database Schema: The database schema is as follow:

Item(id, item_name, total_count, total_available, model_number, description, location)
Tag(id, item_id, tag)
Request(id, user_id, item_id, reason, status)
User(id, user_id, username, password)

Development Environment: The technology versions used for development are specified below:

Django 1.10.5
Python 3.4.3
Postgresql 9.3
Ubuntu 14.04