

```
package api;

import com.google.gson.Gson;
import com.google.gson.reflect.TypeToken;
import model.Course;

import java.io.FileReader;
import java.io.Reader;
import java.util.ArrayList;
import java.util.List;

public class CourseDatabase {
    private static List<Course> courses = new
ArrayList<>();

    // Load JSON file (call this at the start of your
program)
    public static void load(String filename) {
        try (Reader reader = new FileReader(filename)) {
            Gson gson = new Gson();
            courses = gson.fromJson(reader, new
TypeToken<List<Course>>() {}.getType());
        }

        // Initialize code field for all courses
        for (Course c : courses) {
            c.initCode();
        }
    }

    System.out.println("Courses loaded: " +
courses.size());
} catch (Exception e) {
    e.printStackTrace();
}
}

// Get course by combined code, e.g., "CS115"
public static Course getCourse(String code) {
    for (Course c : courses) {
        if (c.getCode() != null &&
c.getCode().equalsIgnoreCase(code)) {
            return c;
        }
    }
}
```

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        }
    }
    return null;
}

// Optional: get all courses
public static List<Course> getAllCourses() {
    return courses;
}
}
```