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Will Code For Food

**Coupling**

**Analysis**

Coupling is a measure of interdependence between classes or modules. Low coupling is ideal, as it allows for more flexible and changeable code. Changing one class will have less effects and bugs occurring throughout the rest of the program if there is low coupling. Coupling factor is defined as “what proportion of the classes in a project are used by an average class in the project.” The coupling in our project is quite decent, and I would say it’s one of the metrics we’re doing better at. Afferent coupling is the number of classes used by outside classes. Efferent coupling is the number of classes that a class depends upon. These can be used to show instability, which is being covered by Gavin’s metric.

So our overall coupling has gotten worse throughout the quarter. We have more afferent coupling in some of the view packages like view.ridesharing and view.getinvolved. As we build more features, our efferent coupling of our common packages get higher, which is expected. I would still say our coupling is within a good range.

|  |  |
| --- | --- |
| Overall Coupling | 10.63% |

|  |  |  |
| --- | --- | --- |
| Package | Afferent Coupling | Efferent Coupling |
| **Average** | 146.33 | 185.52 |
| controller | 34 | 8 |
| controller.api\_interfaces | 12 | 51 |
| controller.authentication | 23 | 62 |
| controller.retrieval | 321 | 213 |
| model.common.common | 722 | 379 |
| model.common.common.sorting | 30 | 80 |
| model.common.common.users | 56 | 53 |
| model.common.form | 329 | 69 |
| model.common.messaging | 24 | 33 |
| model.getInvolved | 46 | 37 |
| model.resources | 128 | 76 |
| model.ridesharing | 284 | 383 |
| tasks | 12 | 145 |
| values | 554 | 0 |
| view.common | 326 | 662 |
| view.dynamic\_form | 4 | 29 |
| view.events | 31 | 233 |
| view.getinvolved | 23 | 151 |
| view.resources | 49 | 408 |
| view.ridesharing | 50 | 739 |
| view.summermissions | 13 | 85 |
| controller | 34 | 8 |
| controller.api\_interfaces | 12 | 51 |
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