Hybrid – 4

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**Create a UML diagram for each of the following:**

1. Judo is a martial art

|  |
| --- |
| Judo |
| -sport: String |

|  |
| --- |
| Sport |
| -nameOfSport : String |

The relationship between class Judo and Sport is a Composition

1. A person may have a bicycle

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| --- |
| Person |
| -vehicleType: String  -name: String  -age: int |

|  |
| --- |
| Vehicle |
| -name: String  -modleNo.-int |

The relationship between class Person and Vehicle is a Aggregation

1. A molecule is made up of atoms

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| --- |
| Molecule |
| -type: String  Name: -String |

|  |
| --- |
| Atom |
| -name: String  -atomicMass: int  -atomicNo.- int |

The relationship between class Molecule and atom is Composition

1. An athlete uses exercises

|  |
| --- |
| Athlete |
| -type: String  -noOfActivites- int |

|  |
| --- |
| Exercise |
| -strength: String  -name - String |

The relationship between class Athlete and Exercise is Association

1. One student has many courses, one course has many students

|  |
| --- |
| Student |
| -name: String  -courseName: String  -studentNo.-int |

|  |
| --- |
| Course |
| -courseName: String  -numofStudent: int |

The relationship between class Student and Course is Cardinality