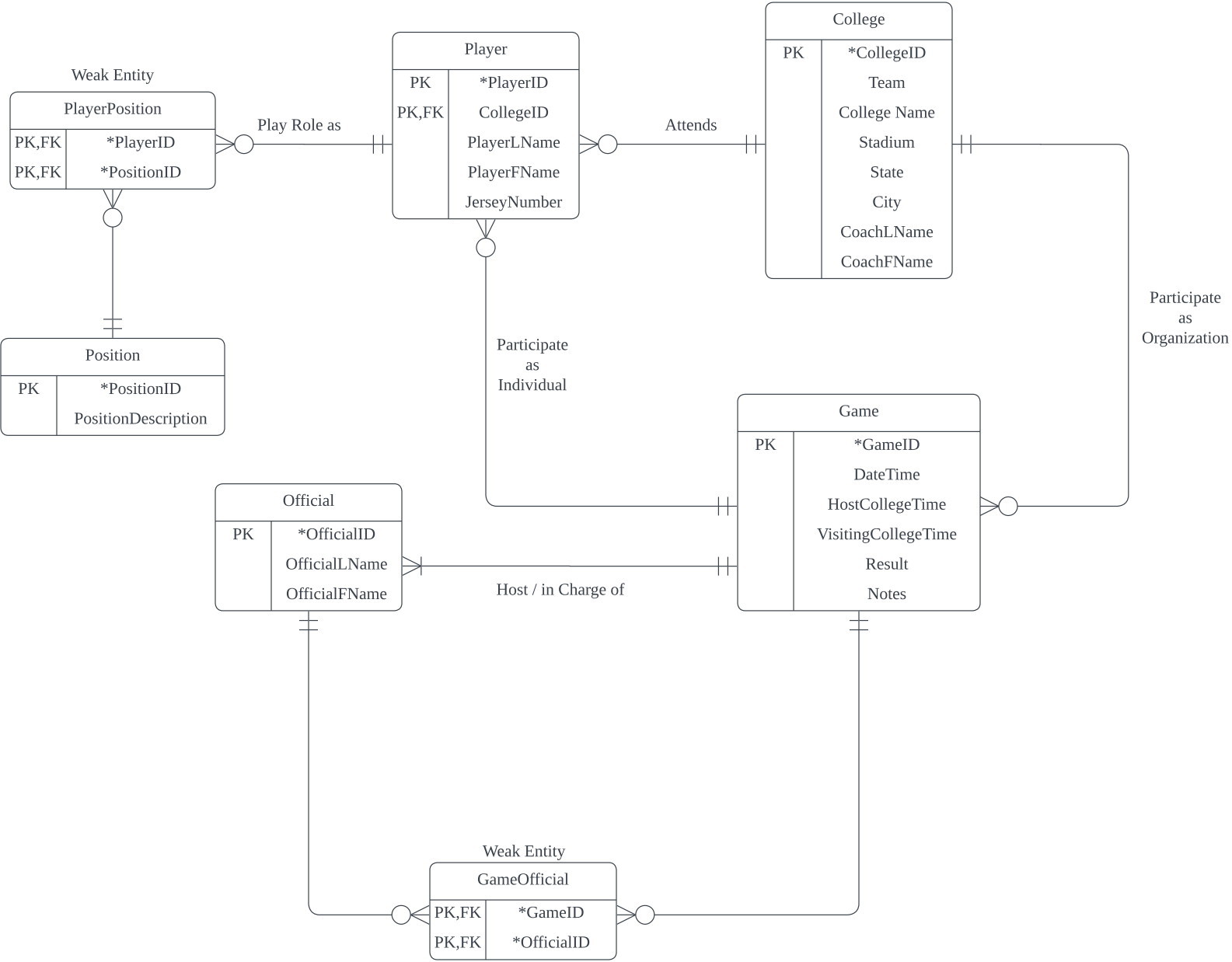


# DAMG-6210\_Lab1\_Part1

Haonan Peng | February 1, 2023



## Part 2

lab1.json

```
[{
  "_id": {
    "$oid": "63dac7e62ddce8df6a2f6ded"
  },
  "CustomerID": 30010,
  "LastName": "Mew",
  "FirstName": "Stephen",
  "EmailAddress": "stephen4@adventure-works.com",
  "Orders": [
    {
      "SalesOrderID": 44529,
      "TotalOrderQuantity": 1,
      "OrderValue": 472
    },
    {
      "SalesOrderID": 46063,
      "TotalOrderQuantity": 1,
      "OrderValue": 985
    }
  ]
}, {
  "_id": {
    "$oid": "63dac7e62ddce8df6a2f6dee"
  },
  "CustomerID": 30020,
  "LastName": "Miller",
  "FirstName": "Emilo",
  "EmailAddress": "emilo0@adventure-works.com",
  "Orders": [
    {
      "SalesOrderID": 53525,
      "TotalOrderQuantity": 80,
      "OrderValue": 592223
    },
    {
      "SalesOrderID": 58968,
      "TotalOrderQuantity": 16,
      "OrderValue": 141240
    },
    {
      "SalesOrderID": 65286,
```

```
    "TotalOrderQuantity": 21,  
    "OrderValue": 134777  
  },  
  {  
    "SalesOrderID": 71838,  
    "TotalOrderQuantity": 17,  
    "OrderValue": 103238  
  }  
]  
}, {  
  "_id": {  
    "$oid": "63dac7e62ddce8df6a2f6def"  
  },  
  "CustomerID": 30083,  
  "LastName": "Track",  
  "FirstName": "Glenn",  
  "EmailAddress": "glenn0@adventure-works.com",  
  "Orders": [  
    {  
      "SalesOrderID": 47398,  
      "TotalOrderQuantity": 152,  
      "OrderValue": 3597824  
    },  
    {  
      "SalesOrderID": 48339,  
      "TotalOrderQuantity": 124,  
      "OrderValue": 2574849  
    },  
    {  
      "SalesOrderID": 49496,  
      "TotalOrderQuantity": 72,  
      "OrderValue": 1428758  
    },  
    {  
      "SalesOrderID": 50689,  
      "TotalOrderQuantity": 120,  
      "OrderValue": 2343950  
    }  
  ]  
}]
```

Average:

```
[
  {
    "_id": null,
    "avgOrderValue": 1091831.6,
    "avgOrderQuantity": 60.4
  }
]
```

Code:

```
use("DAMG6210_Lab1Part2");

db.lab1.drop();

db.lab1.insertMany([
  {'CustomerID': 30010, 'LastName': 'Mew', 'FirstName': 'Stephen', 'EmailAddress':
'stephen4@adventure-works.com',
  'Orders':[
    {'SalesOrderID': 44529, 'TotalOrderQuantity': 1, 'OrderValue': 472},
    {'SalesOrderID': 46063, 'TotalOrderQuantity': 1, 'OrderValue': 985},
  ]
},
  {'CustomerID': 30020, 'LastName': 'Miller', 'FirstName': 'Emilo',
'EmailAddress': 'emilo0@adventure-works.com',
  'Orders':[
    {'SalesOrderID': 53525, 'TotalOrderQuantity': 80, 'OrderValue': 592223},
    {'SalesOrderID': 58968, 'TotalOrderQuantity': 16, 'OrderValue': 141240},
    {'SalesOrderID': 65286, 'TotalOrderQuantity': 21, 'OrderValue': 134777},
    {'SalesOrderID': 71838, 'TotalOrderQuantity': 17, 'OrderValue': 103238}
  ]
},
  {'CustomerID': 30083, 'LastName': 'Track', 'FirstName': 'Glenn', 'EmailAddress':
'glenn0@adventure-works.com',
  'Orders':[
    {'SalesOrderID': 47398, 'TotalOrderQuantity': 152, 'OrderValue': 3597824},
    {'SalesOrderID': 48339, 'TotalOrderQuantity': 124, 'OrderValue': 2574849},
    {'SalesOrderID': 49496, 'TotalOrderQuantity': 72, 'OrderValue': 1428758},
    {'SalesOrderID': 50689, 'TotalOrderQuantity': 120, 'OrderValue': 2343950}
  ]
},
]);

//db.lab1.find({});
```

```
//
db.lab1.aggregate([
  {$unwind: "$Orders"},
  {$group:
    {
      _id: null,
      avgOrderValue: {$avg: "$Orders.OrderValue"},
      avgOrderQuantity: {$avg: "$Orders.TotalOrderQuantity"}
    }
  }
]);
//
```