

@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .  
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .  
@prefix schema: <http://schema.org/> .  
@prefix xml: <http://www.w3.org/XML/1998/namespace> .  
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .  
@prefix foaf: <http://xmlns.com/foaf/0.1/> .  
@prefix mgns: <http://inf558.org/games#> .

##### Main Classes #####  
#####

## Game class ##

mgns:Game a schema:Class ;  
    rdfs:subClassof schema:Game ;  
    schema:name schema:Text ;  
    schema:description schema:Text ;  
    schema:url schema:URL ;  
    schema:datePublished schema:date ;  
    mgns:supportedPlatform mgns:Platform ;  
    mgns:hasMSD mgns:MSD ;  
    mgns:developedBy mgns:Enterprise ;  
    mgns:publishedBy mgns:Enterprise ;  
    mgns:hasGameMode mgns:GameMode ;  
    mgns:hasGenre mgns:Genre ;  
    mgns:hasTheme mgns:Theme ;  
    mgns:ratingValue xsd:decimal ;  
    mgns:ratingCount xsd:integer ;  
    mgns:bestRating xsd:decimal .  
    mgns:soldBy mgns:Seller ;  
    mgns:price schema:Text ;  
    mgns:oldPrice schema:Text ;  
    mgns:discount schema:Text ;  
    mgns:sellerFeedback schema:Text ;  
    mgns:sellerUrl schema:Text .

## Enterprise class ##

mgns:Enterprise a schema:Class ;  
    rdfs:subClassof schema:Organization ;  
    schema:name schema:Text ;  
    mgns:ratingValue xsd:integer ;  
    mgns:ratingCount xsd:integer ;  
    mgns:bestRating xsd:integer .  
    schema:logo schema:URL ;  
    schema:url schema:URL ;  
    schema:foundingDate xsd:date ;  
    schema:foundingLocation schema:Place .

### ## Seller class ##

```
mgns:Seller a schema:Class ;  
  rdfs:subClassof schema:seller ;  
  schema:name schema:Text ;  
  mgns:ratingValue xsd:integer ;  
  mgns:bestRating xsd:integer .
```

### ## Platform class ##

```
mgns:Platform a schema:Class ;  
  mgns:platformName schema:Text ;  
  mgns:platformType schema:Text ;  
  mgns:operatingSystem schema:Text ;  
  mgns:memory schema:Text ;  
  mgns:cpu schema:Text ;  
  mgns:storage schema:Text ;  
  mgns:supportedResolution schema:Text .
```

### ## Minimum Supporting Device class ##

```
mgns:MSD a schema:Class ;  
  mgns:processor mgns:Processor ;  
  mgns:graphics mgns:Graphics ;  
  mgns:memory schema:Text ;  
  mgns:diskSpace schema:Text ;
```

### ## Graphics class ##

```
mgns:Graphics a rdfs:Class ;  
  mgns:ROPs xsd:integer ;  
  mgns:TMUs xsd:integer ;  
  mgns:bus schema:Text ;  
  mgns:gpuChip schema:Text ;  
  mgns:gpuClockSpeed_MHz xsd:integer ;  
  mgns:gpuMemoryBits xsd:integer ;  
  mgns:gpuMemorySize_MB xsd:integer ;  
  mgns:gpuMemoryType schema:Text ;  
  mgns:memoryClockSpeed_MHz xsd:integer ;  
  mgns:shader_1 xsd:integer ;  
  mgns:shader_2 xsd:integer ;  
  schema:datePublished schema:date ;  
  schema:name schema:Text ;  
  schema:url schema:URL .
```

## ## Processor class ##

```
mgns:Processor a rdfs:Class ;
    mgns:higherClockSpeedghz xsd:decimal ;
    mgns:l3CacheMB xsd:integer ;
    mgns:lowerClockSpeedghz xsd:decimal ;
    mgns:numCore1 xsd:integer ;
    mgns:numCore2 xsd:integer ;
    mgns:process xsd:integer ;
    mgns:socket schema:Text ;
    schema:name schema:Text ;
    mgns:hasCPUMark xsd:decimal .
```

## ### Additional Classes ###

#####

```
mgns:GameMode a rdfs:Class ;
    rdfs:label "Game Mode"@en .
```

```
mgns:Genre a rdfs:Class ;
    rdfs:label "Genre"@en .
```

```
mgns:Theme a rdfs:Class ;
    rdfs:label "Theme"@en .
```

## ##### Properties #####

#####

## ## Game, Enterprise, Seller Class Properties ##

```
mgns:supportedPlatform a rdf:Property
    rdfs:label "Supported Platform"@en ;
    rdfs:domain mgns:Game ;
    rdfs:range mgns:Platform .
```

```
mgns:hasMSD a rdf:Property
    rdfs:label "Minimum Supporting Device"@en ;
    rdfs:domain mgns:Game ;
    rdfs:range mgns:MSD .
```

```
mgns:developedBy a rdf:Property
    rdfs:label "Developed By"@en ;
    rdfs:domain mgns:Game ;
    rdfs:range mgns:Enterprise .
```

mgns:publishedBy a rdf:Property  
    rdfs:label "Published By"@en ;  
    rdfs:domain mgns:Game ;  
    rdfs:range mgns:Enterprise .

mgns:hasGameMode a rdf:Property  
    rdfs:label "Has Game"@en ;  
    rdfs:domain mgns:Game ;  
    rdfs:range mgns:GameMode .

mgns:hasGenre a rdf:Property  
    rdfs:label "Has Genre"@en ;  
    rdfs:domain mgns:Game ;  
    rdfs:range mgns:Genre .

mgns:hasTheme a rdf:Property  
    rdfs:label "Has Theme"@en ;  
    rdfs:domain mgns:Game ;  
    rdfs:range mgns:Theme .

mgns:ratingValue a rdf:Property  
    rdfs:label "Rating Value"@en ;  
    rdfs:domain mgns:Game, mgns:Enterprise, mgns:Seller ;  
    rdfs:range xsd:integer .

mgns:ratingCount a rdf:Property  
    rdfs:label "Rating Count"@en ;  
    rdfs:domain mgns:Game, mgns:Enterprise ;  
    rdfs:range xsd:integer .

mgns:bestRating a rdf:Property  
    rdfs:label "Best Possible Rating Value"@en ;  
    rdfs:domain mgns:Game, mgns:Enterprise, mgns:Seller ;  
    rdfs:range xsd:integer .

mgns:soldBy a rdf:Property  
    rdfs:label "Sold by"@en ;  
    rdfs:domain mgns:Game ;  
    rdfs:range mgns:Seller .

mgns:price a rdf:Property  
    rdfs:label "Game Price"@en ;  
    rdfs:domain mgns:Game ;  
    rdfs:range schema:Text .

mgns:oldPrice a rdf:Property  
    rdfs:label "Price"@en ;

rdfs:domain mgns:Game ;  
rdfs:range schema:Text .

mgns:discount a rdf:Property  
rdfs:label "Discount"@en ;  
rdfs:domain mgns:Game ;  
rdfs:range schema:Text .

mgns:sellerFeedback a rdf:Property  
rdfs:label "Feedback for Seller"@en ;  
rdfs:domain mgns:Game ;  
rdfs:range schema:Text .

mgns:sellerUrl a rdf:Property  
rdfs:label "Seller website"@en ;  
rdfs:domain mgns:Game ;  
rdfs:range schema:Text .

### ## Platform Class Properties ##

mgns:platformName a rdf:Property  
rdfs:label "Platform Name"@en ;  
rdfs:domain mgns:Platform ;  
rdfs:range schema:Text .

mgns:platformType a rdf:Property  
rdfs:label "Platform Type"@en ;  
rdfs:domain mgns:Platform ;  
rdfs:range schema:Text .

mgns:operatingSystem a rdf:Property  
rdfs:label "Operating System"@en ;  
rdfs:domain mgns:Platform ;  
rdfs:range schema:Text .

mgns:memory a rdf:Property  
rdfs:label "Memory"@en ;  
rdfs:domain mgns:Platform ;  
rdfs:range schema:Text .

mgns:cpu a rdf:Property  
rdfs:label "CPU"@en ;  
rdfs:domain mgns:Platform ;  
rdfs:range schema:Text .

mgns:storage a rdf:Property  
rdfs:label "Storage"@en ;  
rdfs:domain mgns:Platform ;

rdfs:range schema:Text .

mgns:supportedResolution a rdf:Property  
rdfs:label "Supported Resolution"@en ;  
rdfs:domain mgns:Platform ;  
rdfs:range schema:Text .

## ## MSD Class Properties ##

mgns:processor a rdf:Property  
rdfs:label "Processor"@en ;  
rdfs:domain mgns:MSD ;  
rdfs:range mgns:Processor .

mgns:graphics a rdf:Property  
rdfs:label "Graphics Card"@en ;  
rdfs:domain mgns:MSD ;  
rdfs:range mgns:Graphics .

mgns:memory\_MB a rdf:Property  
rdfs:label "Memory - RAM"@en ;  
rdfs:domain mgns:MSD ;  
rdfs:range schema:Text .

mgns:diskSpace\_MB a rdf:Property  
rdfs:label "Disk Space"@en ;  
rdfs:domain mgns:MSD ;  
rdfs:range schema:Text .

## ## Graphics class Properties ##

mgns:gpuChip a rdf:Property  
rdfs:label "GPU Chip"@en ;  
rdfs:domain mgns:Graphics ;  
rdfs:range schema:Text .

mgns:gpuClockSpeed\_MHz a rdf:Property  
rdfs:label "GPU Clock Speed"@en ;  
rdfs:domain mgns:Graphics ;  
rdfs:range xsd:integer .

mgns:memoryClockSpeed\_MHz a rdf:Property  
rdfs:label "Memory Clock Speed"@en ;  
rdfs:domain mgns:Graphics ;  
rdfs:range schema:Text .

mgns:shader\_1 a rdf:Property  
    rdfs:label "Shader 1"@en ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range xsd:integer .

mgns:shader\_2 a rdf:Property  
    rdfs:label "Shader 2"@en ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range xsd:integer .

mgns:TMUs a rdf:Property  
    rdfs:label "TMUs"@en ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range xsd:integer .

mgns:ROPs a rdf:Property  
    rdfs:label "ROPs"@en ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range xsd:integer .

mgns:bus a rdf:Property  
    rdfs:label "Bus"@en ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range schema:Text .

mgns:gpuMemoryBits a rdf:Property  
    rdfs:label "GPU Memory in bits"@en ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range xsd:integer .

mgns:gpuMemorySize\_MB a rdf:Property  
    rdfs:label "GPU Memory in MB"@en ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range xsd:integer .

mgns:gpuMemoryType a rdf:Property  
    rdfs:label "GPU Memory Type" ;  
    rdfs:domain mgns:Graphics ;  
    rdfs:range schema:Text .

### ## Processor class Properties ##

mgns:higherClockSpeedghz a rdf:Property  
    rdfs:label "Higher Clock Speed"@en ;  
    rdfs:domain mgns:Processor ;  
    rdfs:range xsd:decimal .

mgns:l3CacheMB a rdf:Property  
    rdfs:label "L3 Cache"@en ;  
    rdfs:domain mgns:Processor ;  
    rdfs:range xsd:integer .

mgns:lowerClockSpeedghz a rdf:Property  
    rdfs:label "Lower Clock Speed"@en ;  
    rdfs:domain mgns:Processor ;  
    rdfs:range xsd:decimal .

mgns:numCore1 a rdf:Property  
    rdfs:label "Number of Cores 1"@en ;  
    rdfs:domain mgns:Processor ;  
    rdfs:range xsd:integer .

mgns:numCore2 a rdf:Property  
    rdfs:label "Number of Cores 2"@en ;  
    rdfs:domain mgns:Processor ;  
    rdfs:range xsd:integer .

mgns:socket a rdf:Property  
    rdfs:label "Socket Type"@en ;  
    rdfs:domain mgns:Processor ;  
    rdfs:range schema:Text .

mgns:process a rdf:Property  
    rdfs:label "Process"@en ;  
    rdfs:domain mgns:Processor ;  
    rdfs:range schema:Text .