

# Open Source Frameworks (OSF)

## Designing Your RESTful Gamification API

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Open Source Frameworks (OSF)  
Master of Science in Engineering (MSE)  
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MASTER OF SCIENCE  
IN ENGINEERING

# Planning

Date	Java EE Frameworks	Gamification Project
23.09.13	Intro, Java EE Overview, EJBs	Environment setup 1
30.09.13	REST APIs & JAX-RS	Environment setup 2 (automation)
07.10.13	Design and document a REST API for your gamification engine	
14.10.13	Persistence with JPA	Test and implement your REST API
21.10.13	Break	
28.10.13	Test and implement your REST API	
04.11.13	Spring Framework	<b>Presentations &amp; demos</b>
11.11.13	Technical POC Project: Define the scope & plan the activities	
18.11.13	Technical POC Project: Build the reference system	
25.11.13	Technical POC Project: Build the test infrastructure	
02.12.13	<b>Technical POC Project: Present the results (with a demo)</b>	
09.12.13	Introduction to Javascript frameworks	Get ready with node.js & express
16.12.13	Re-implement your REST API in Javascript	
23.12.13	Break	
30.12.13		
06.01.14	Re-implement your REST API in Javascript	
13.01.14	Java Message Service	<b>Presentations &amp; demos</b>

# Agenda

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## **Introduction**

11h10 - 11h25

## **Group work**

11h25 - 13h00

## **Presentations**

13h00 - 13h20

## **Next steps**

13h20 - 13h35

# What is Gamification?

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*“Gamification is the use of game-thinking and game mechanics in a non-game context in order to engage users and solve problems.*

*Gamification is used in applications and processes to improve user engagement, ROI, data quality, timeliness, and learning.”*

# Examples



433 Reputation

top 44% this month

- +25 Chat application using jms spring and activemq queue
- +5 Is there a way to integrate the S3's ACL with my own user reposi...
- 2 What is dependency injection?
- +5 What version of ember.js should I use for my project?

[view more](#)

foursquare 18

## Mat's Badges

These are all the badges you've unlocked. We've listed them in the order in which you've unlocked them (newest first).



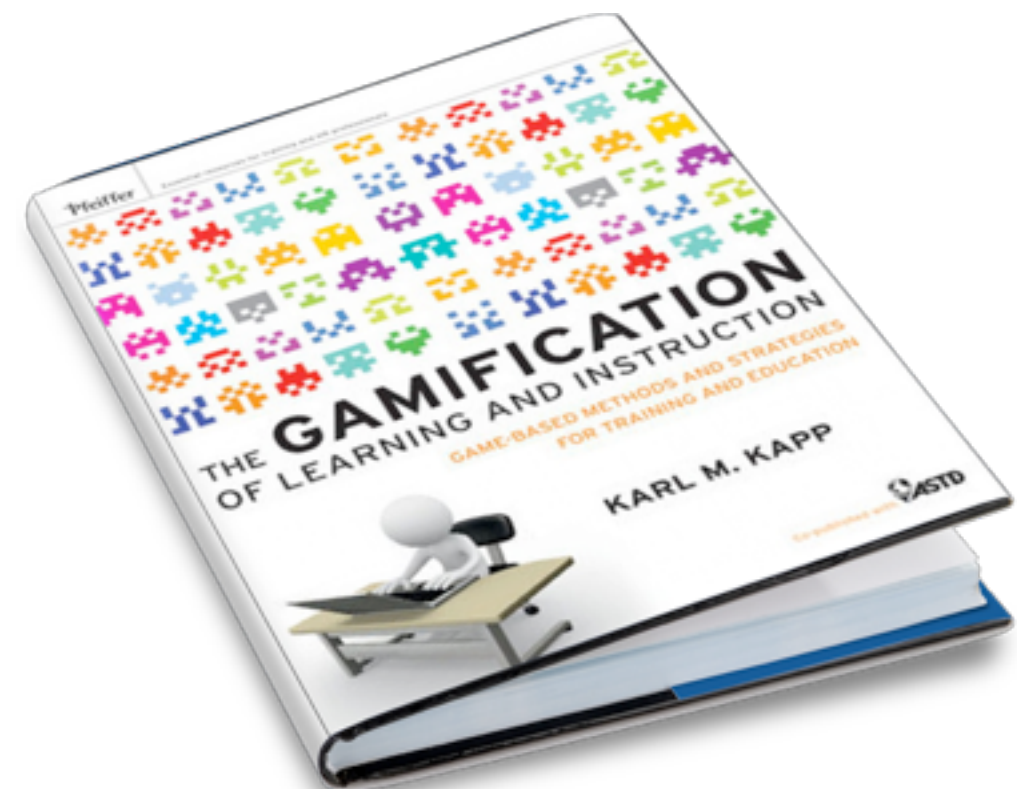
London Calling  
February 14, 2012



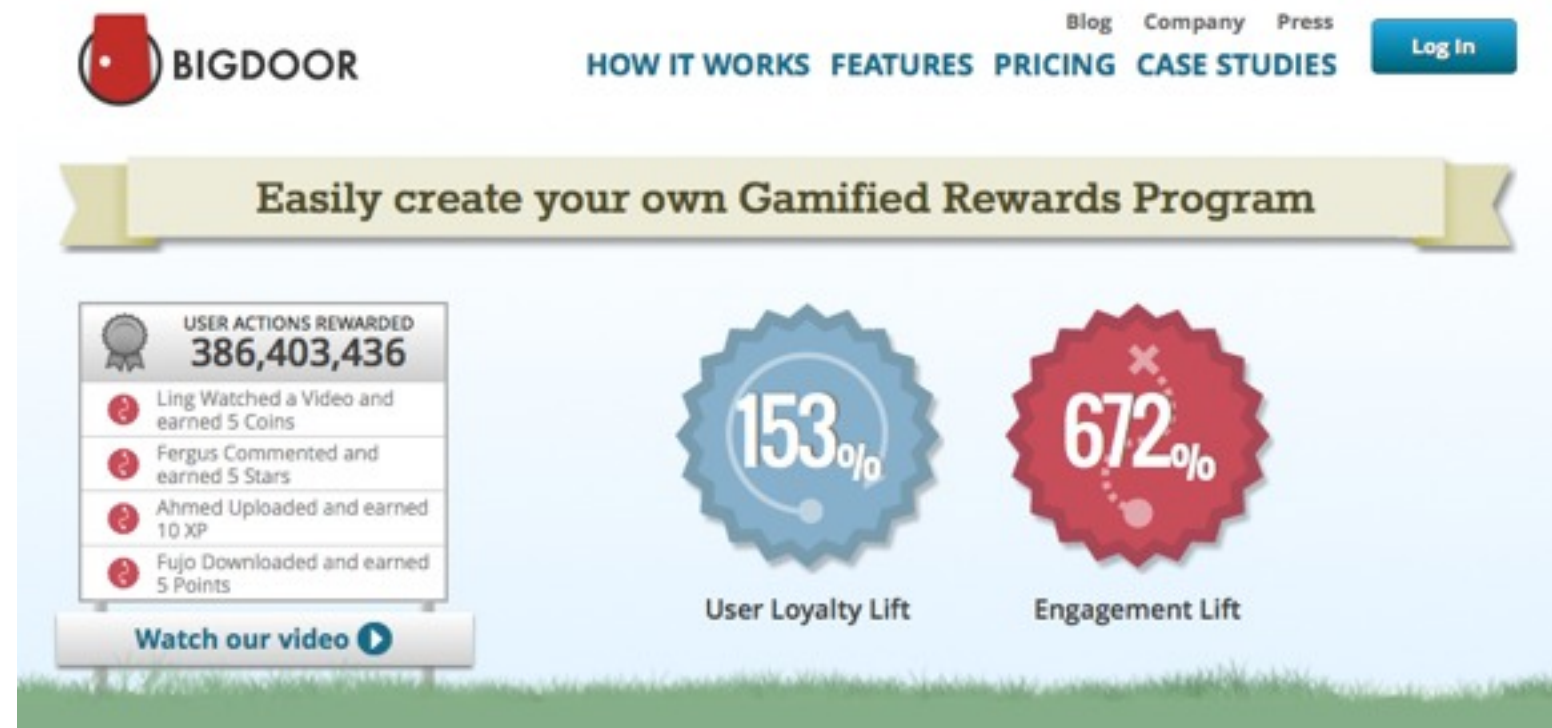
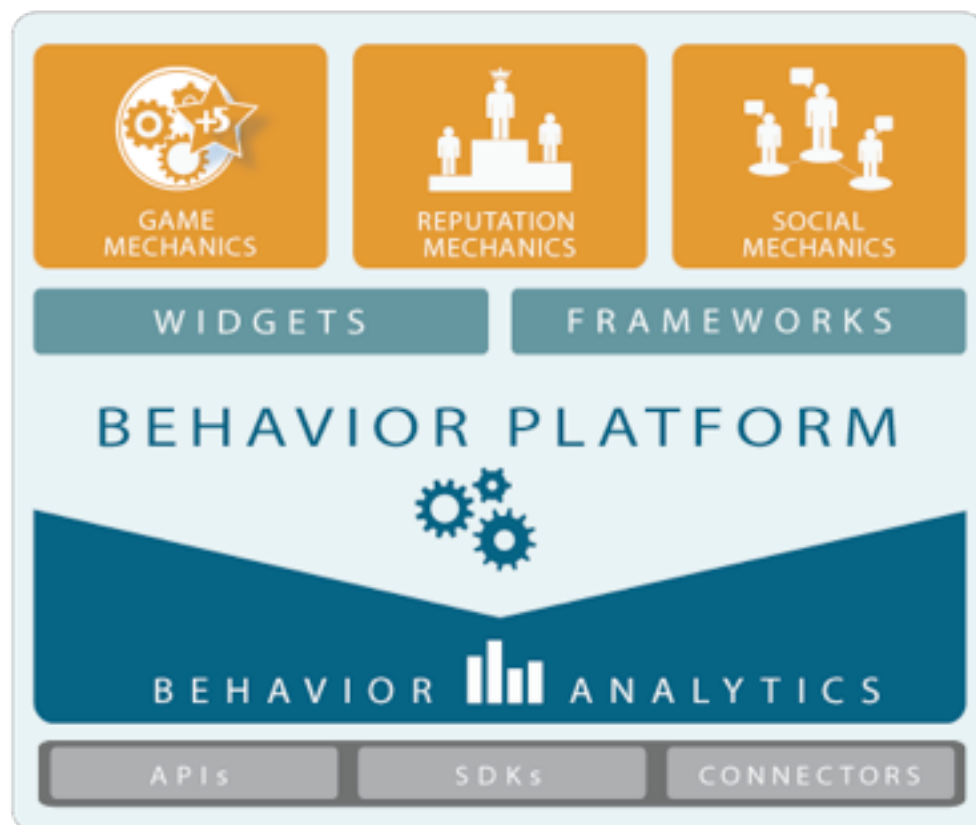
Fresh Brew  
January 11, 2012



Swarm  
October 27, 2011



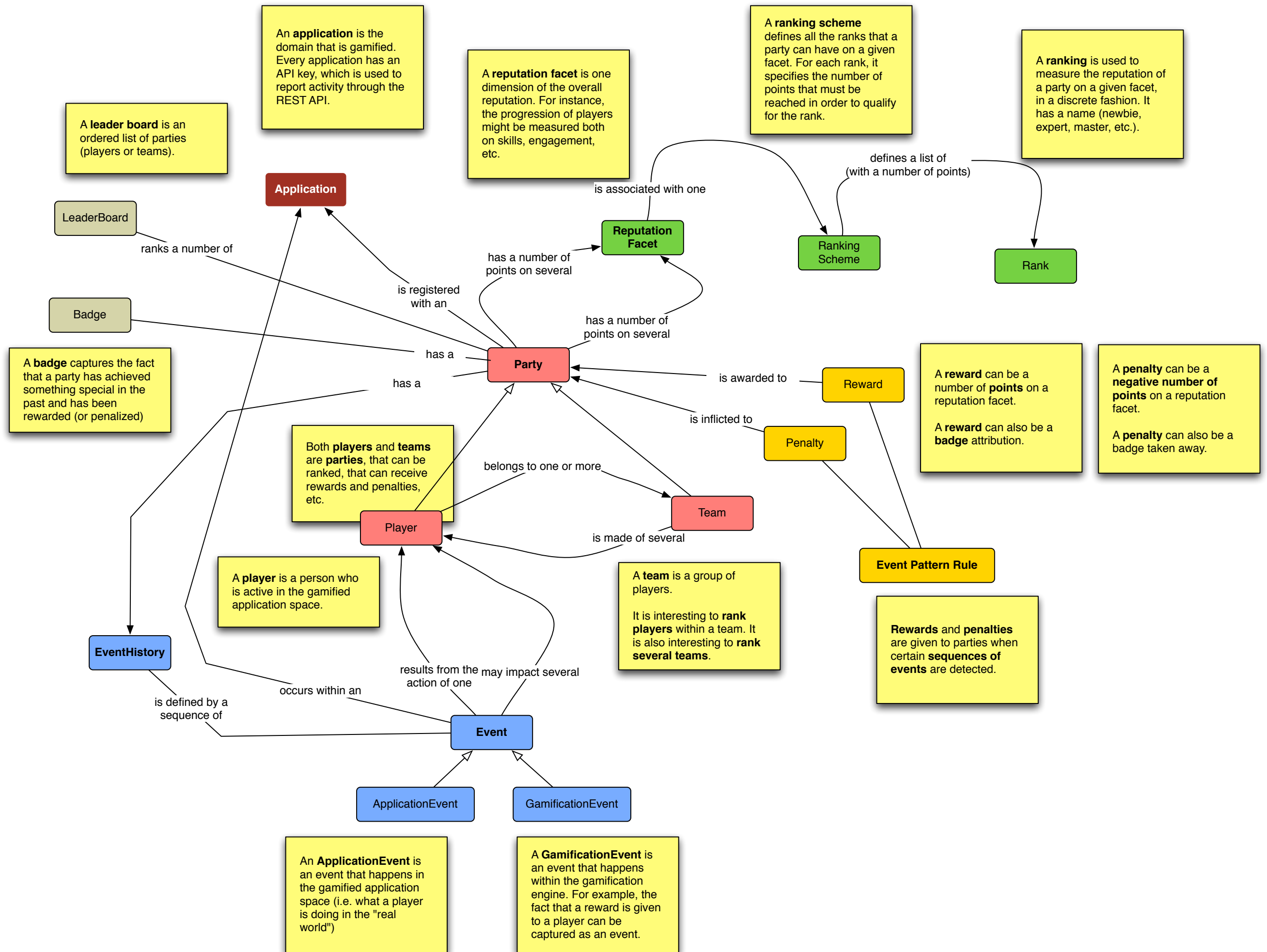
# Gamification Platforms



# Group Work

# Gamification Domain Model (work-in-progress)





An **application** is the domain that is gamified. Every application has an API key, which is used to report activity through the REST API.

Application

is registered  
with an

Party

Both **players** and **teams** are **parties**, that can be ranked, that can receive rewards and penalties, etc.

belongs to one or more

Player

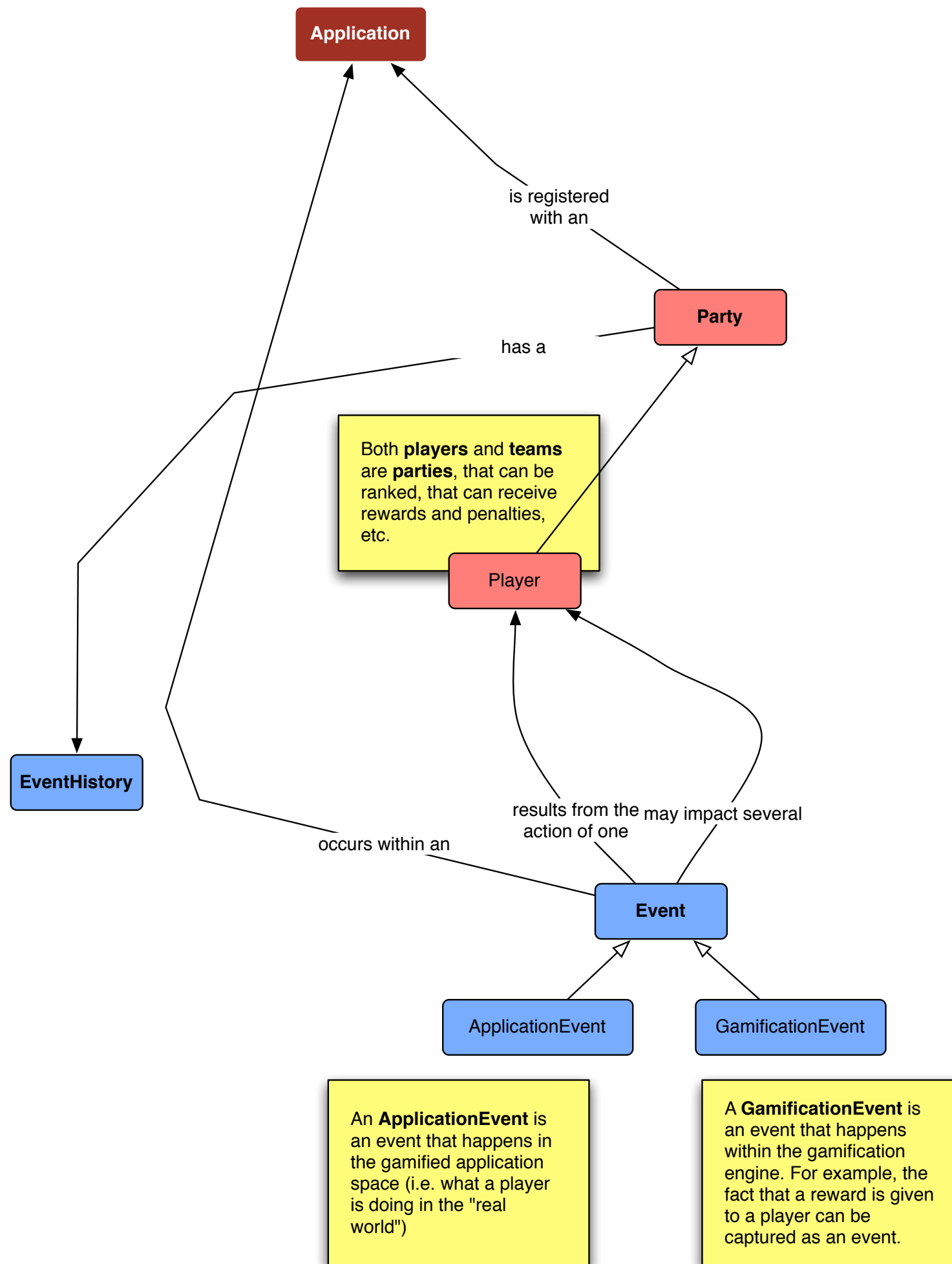
Team

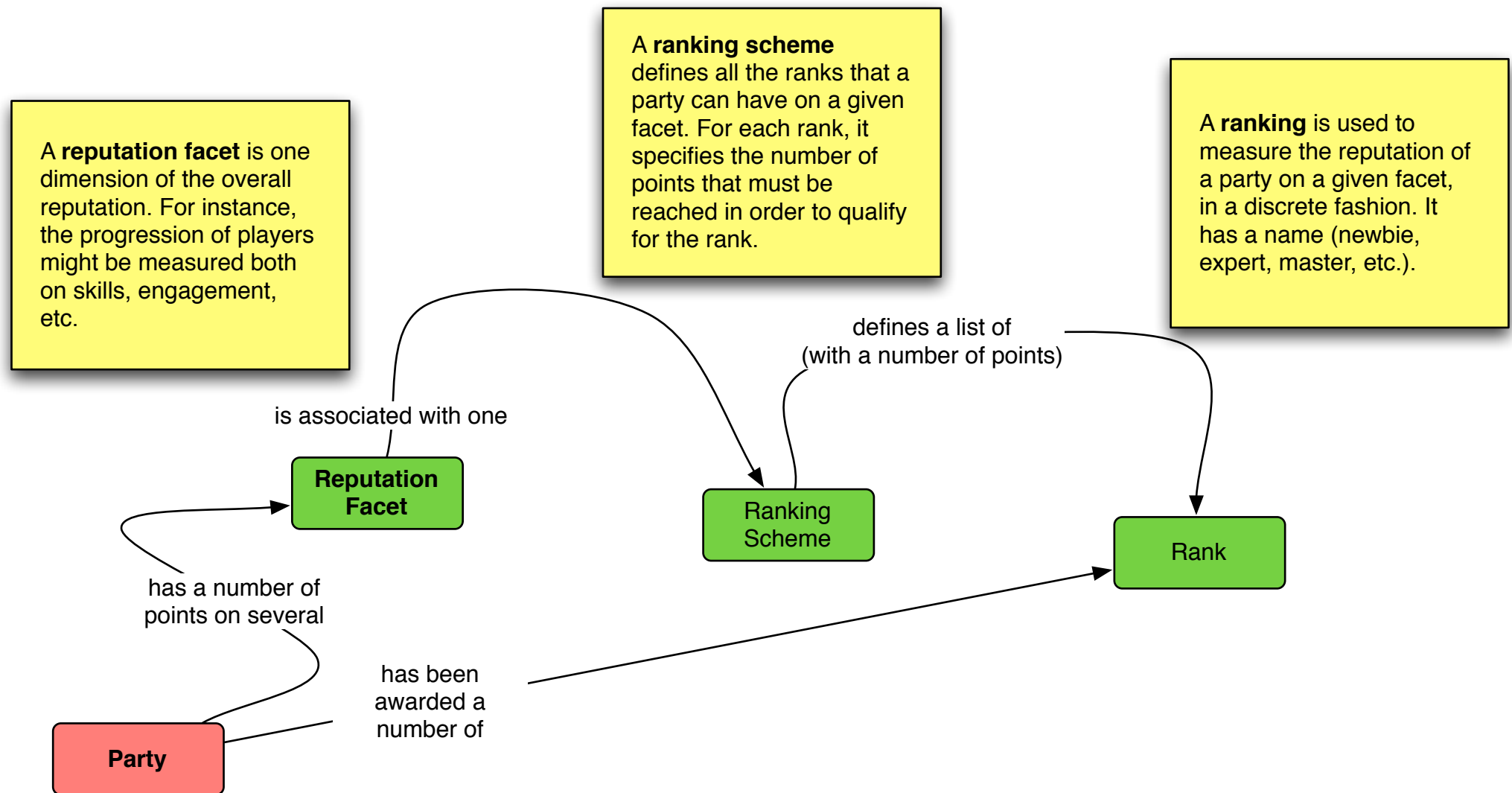
is made of several

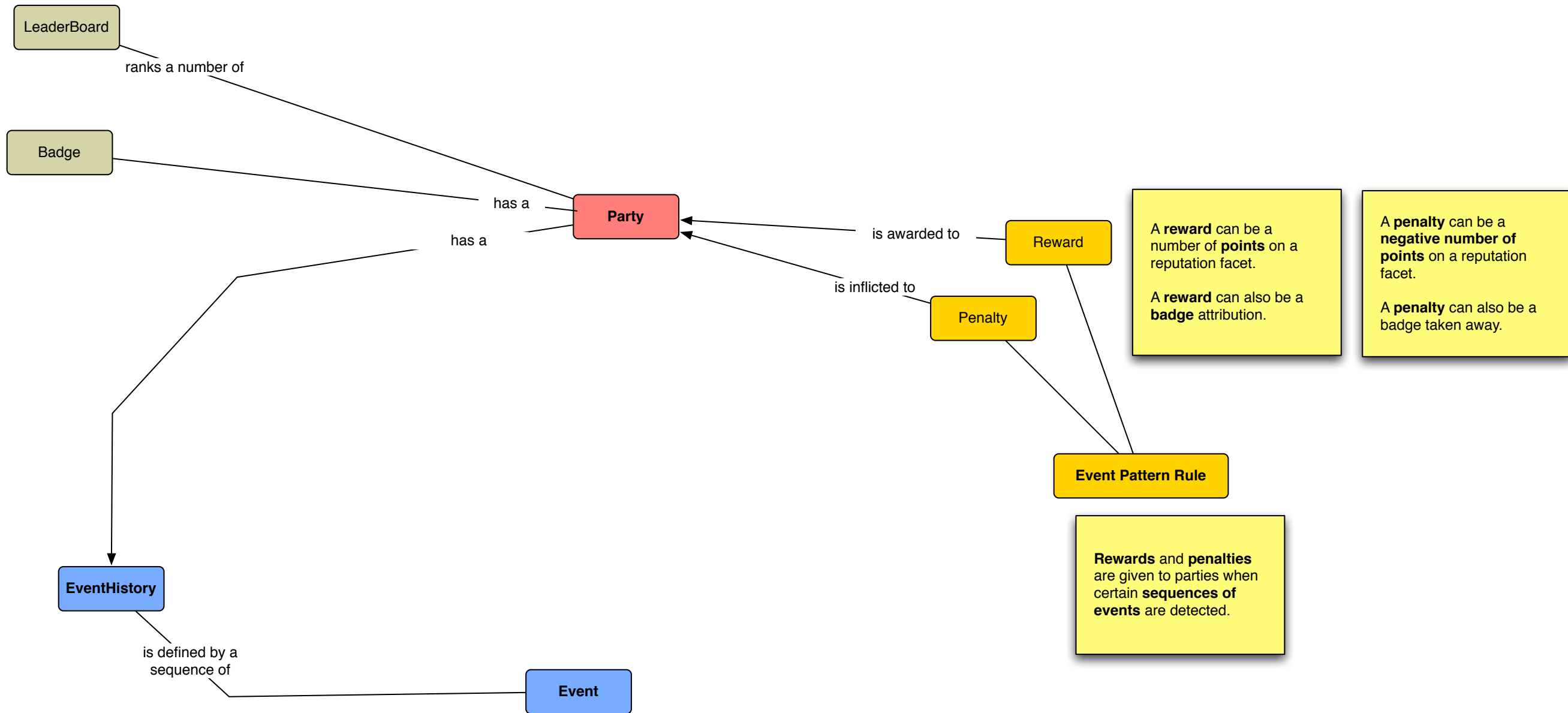
A **player** is a person who is active in the gamified application space.

A **team** is a group of players.

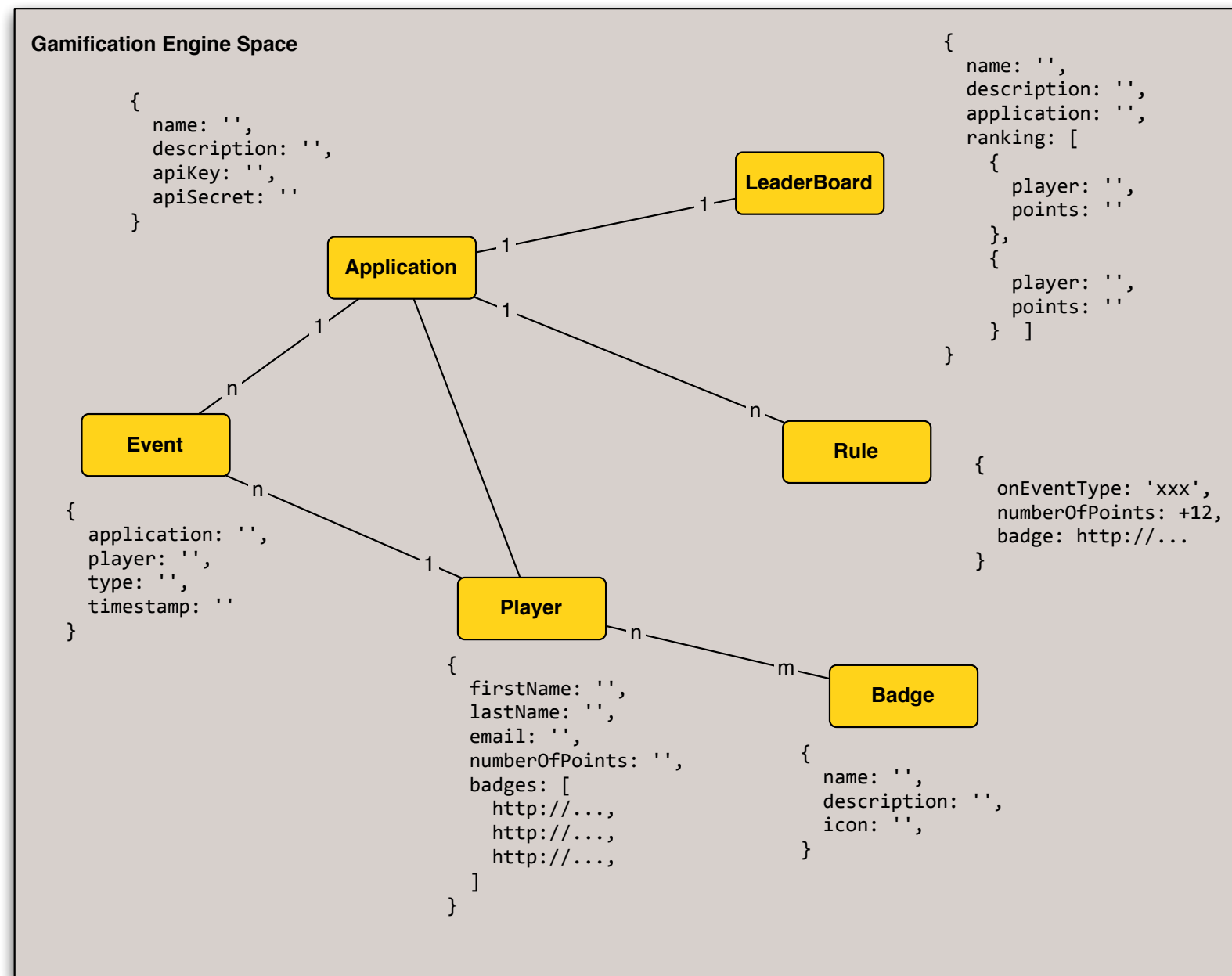
It is interesting to **rank players** within a team. It is also interesting to **rank several teams**.



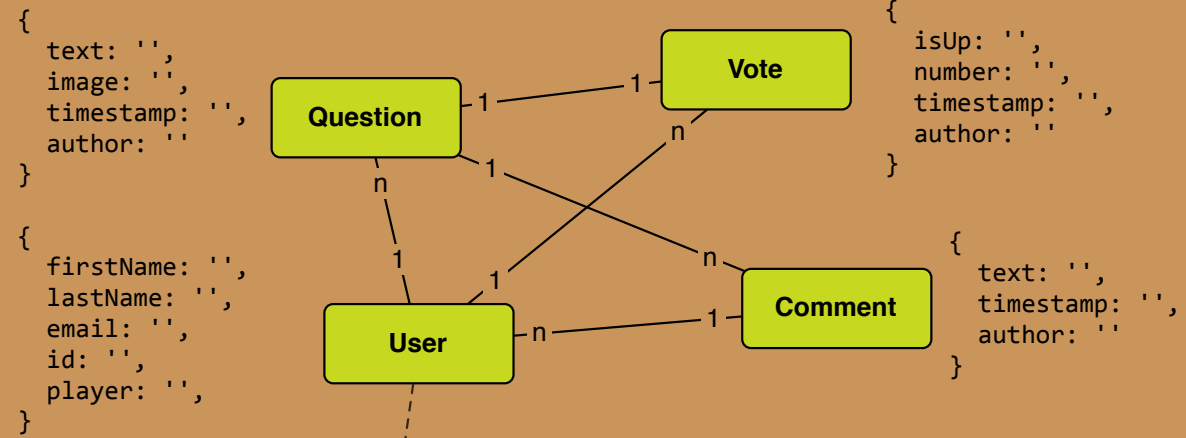




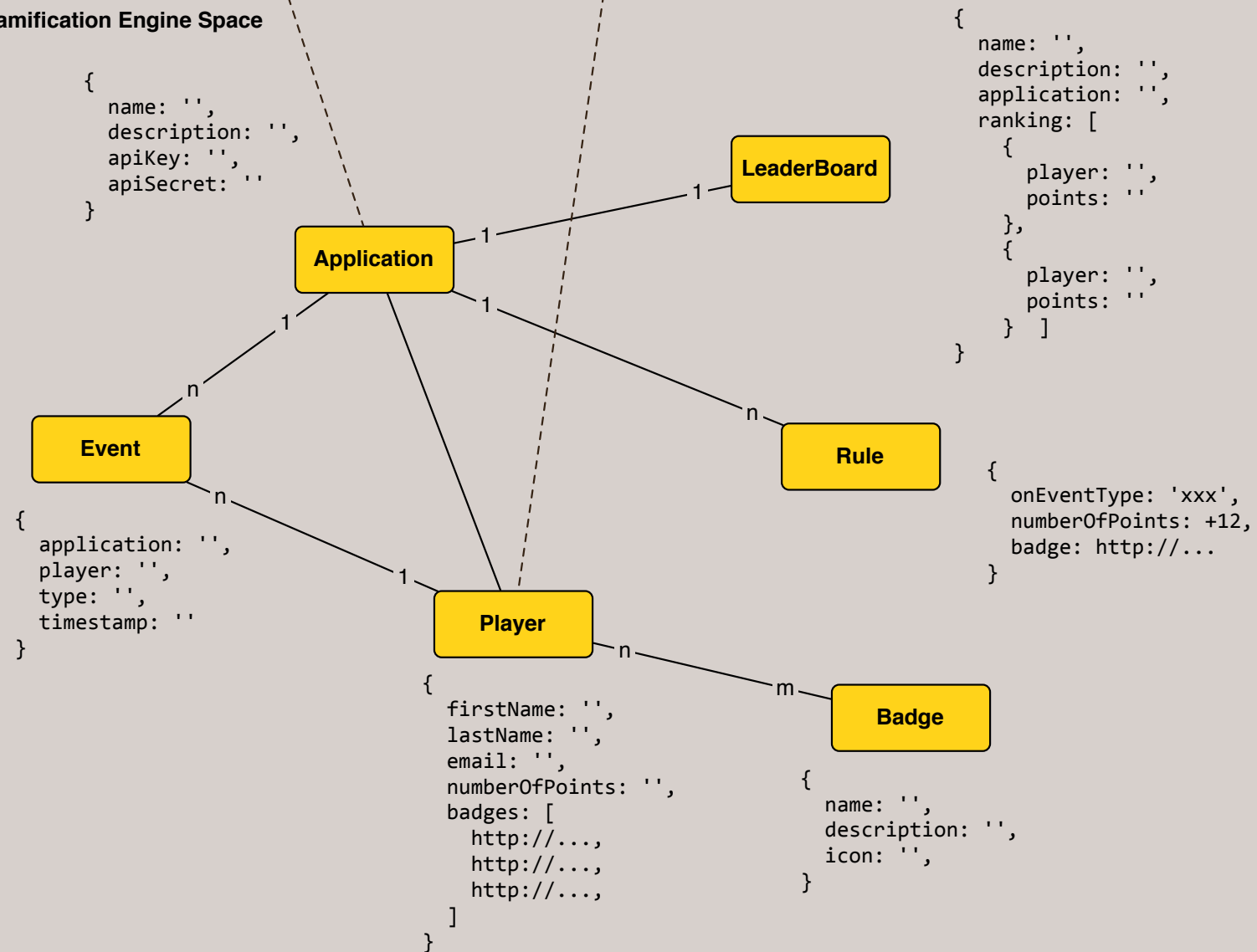
# Gamification Domain Model (simple version)



## Gamified Application Space



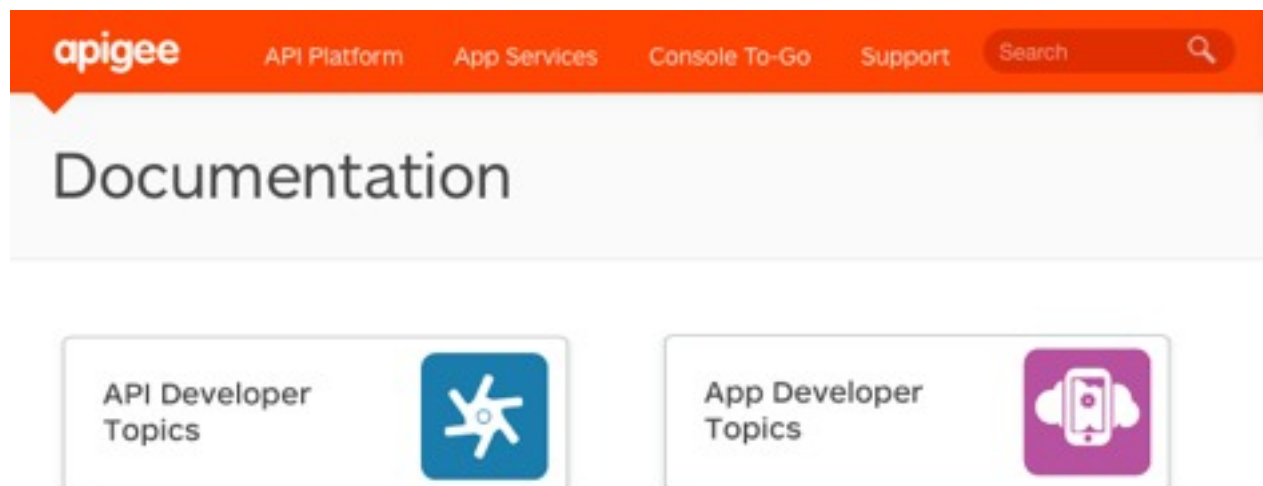
## Gamification Engine Space





How should I specify/document my REST API?

# Some Tools that Might Help/Inspire You



<http://apigee.com/docs/>

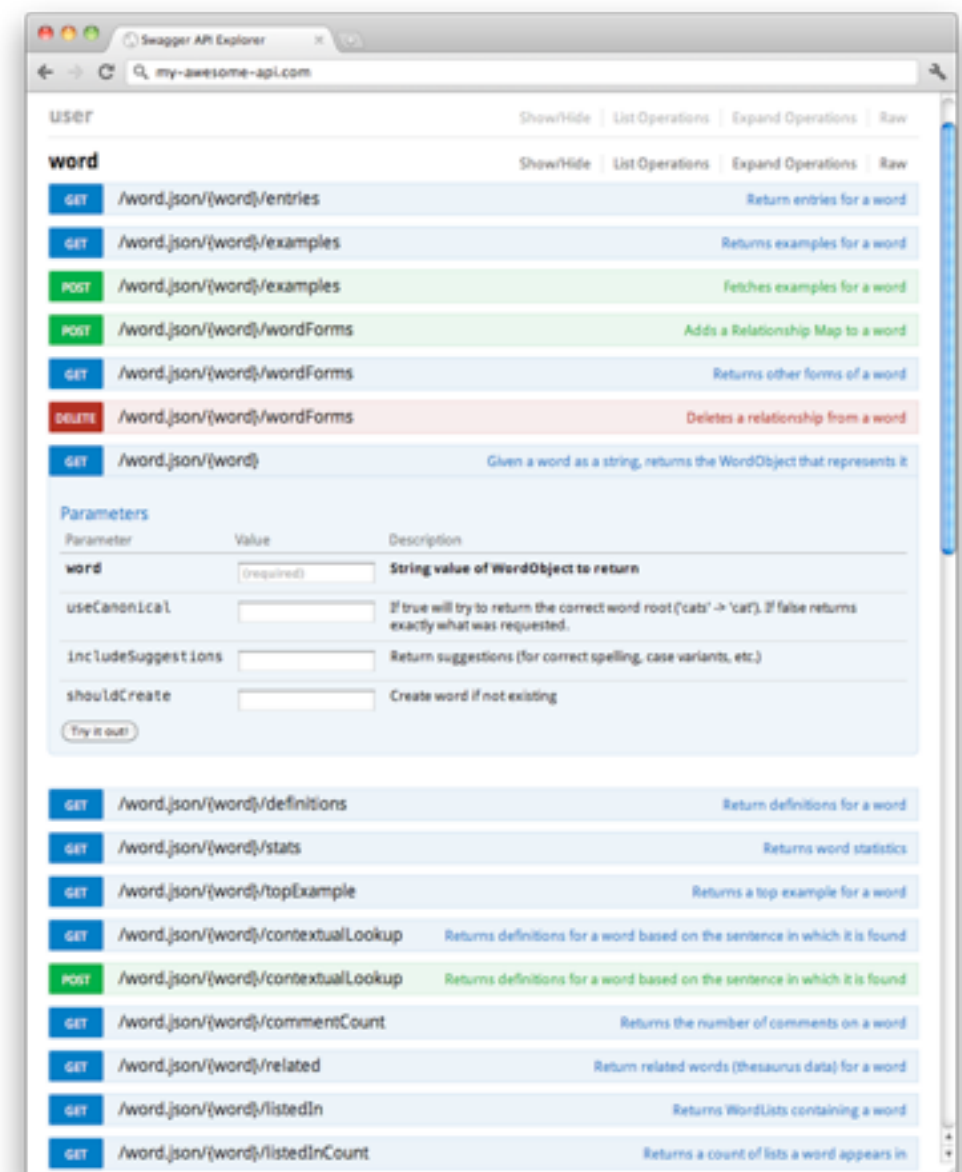


## REST API documentation. Reimagined.

It takes more than a simple HTML page to thrill your API users. The right tools take weeks of development. Weeks that apiary.io saves.

```
GET /shopping-cart
> Accept: application/json
< 200
< Content-Type: application/json
{ "items": [
  { "url": "/shopping-cart/1", "product": "ZPZ",
    "quantity": 1, "name": "New socks", "price": 1.25 }
  ] }
```

<http://apiary.io/>



<https://developers.helloverb.com/swagger/>