

Open Source Frameworks (OSF)

Designing Your RESTful Gamification API

Open Source Frameworks (OSF)
Master of Science in Engineering (MSE)
Olivier Liechti
olivier.liechti@heig-vd.ch



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	Presentations & demos
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	Technical POC Project: Present the results (with a demo)	
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	Presentations & demos

Agenda

Introduction

11h10 - 11h25

Group work

11h25 - 13h00

Presentations

13h00 - 13h20

Next steps

13h20 - 13h35

What is Gamification?

“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).



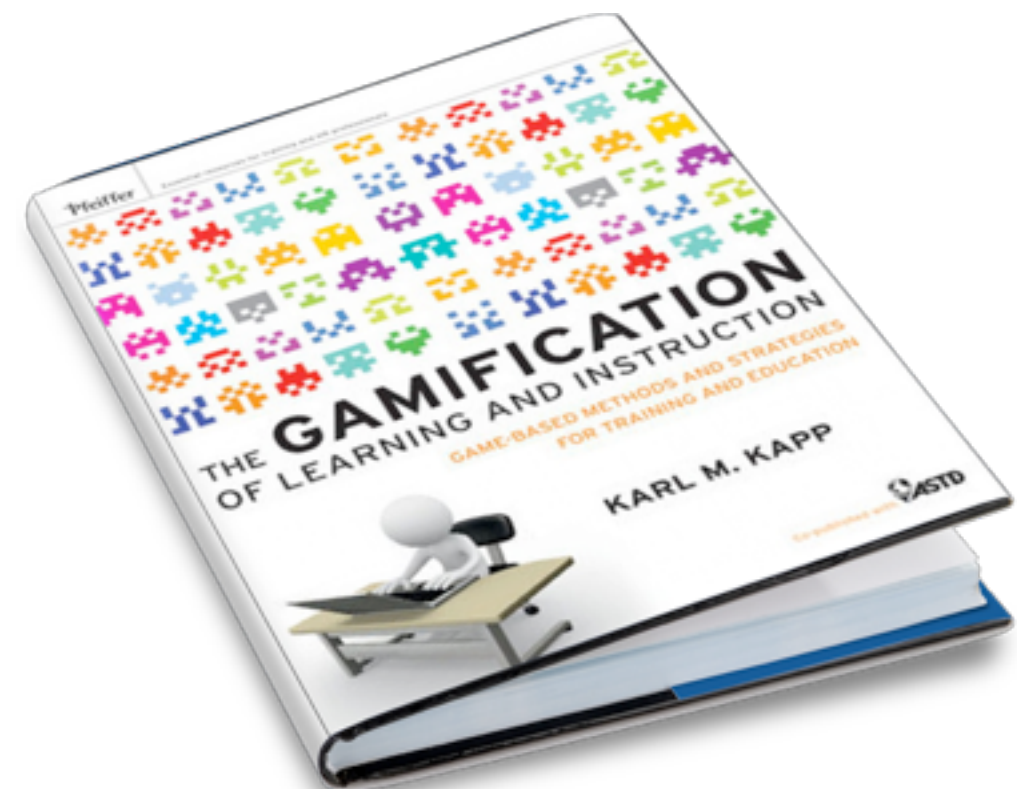
London Calling
February 14, 2012



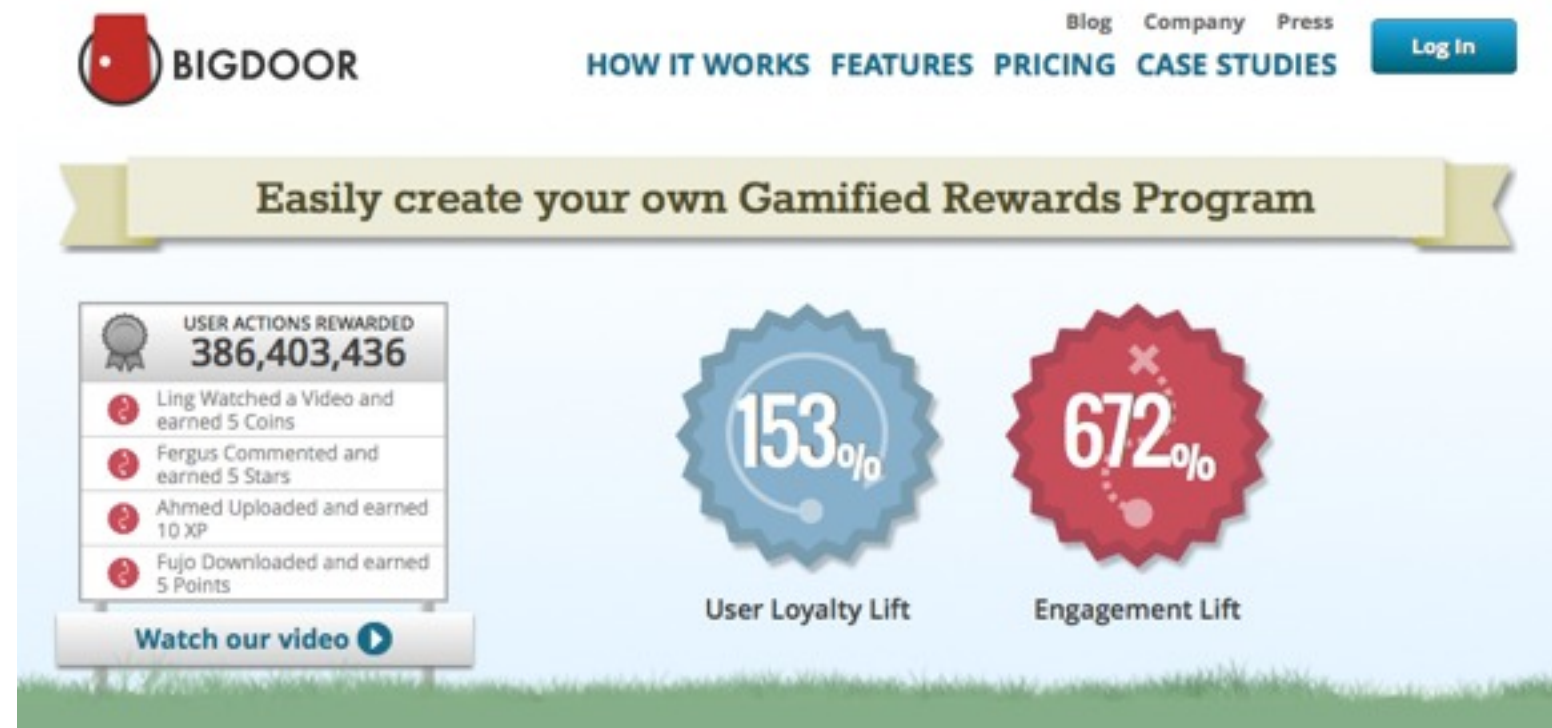
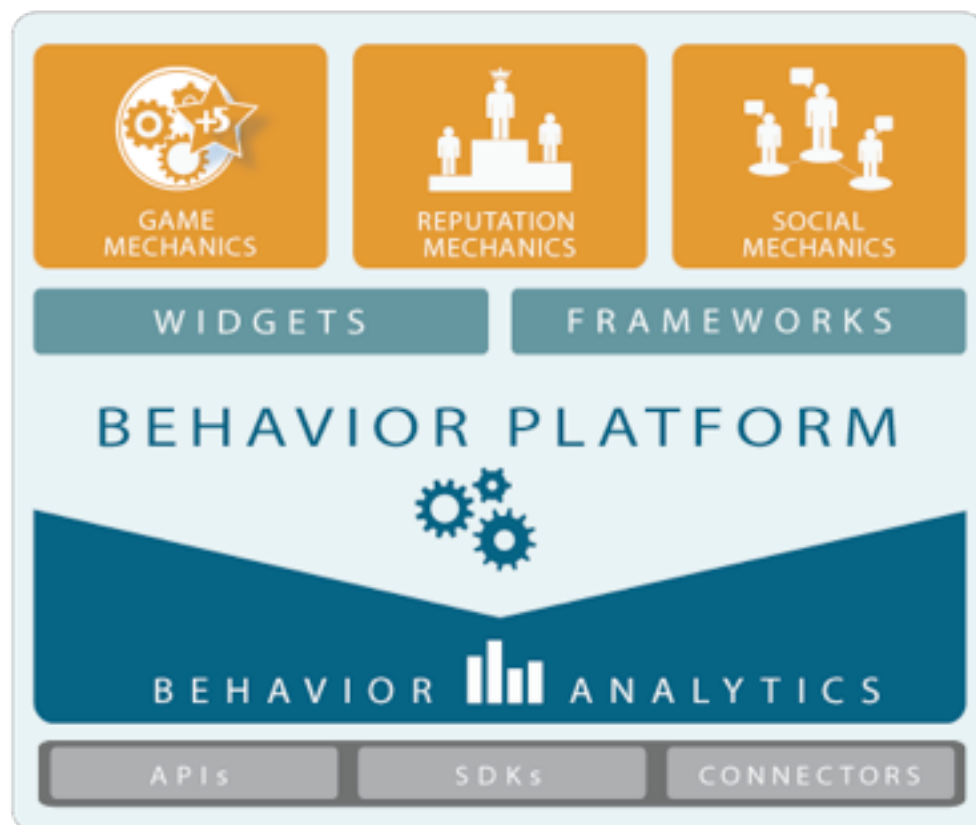
Fresh Brew
January 11, 2012



Swarm
October 27, 2011

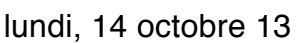


Gamification Platforms



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

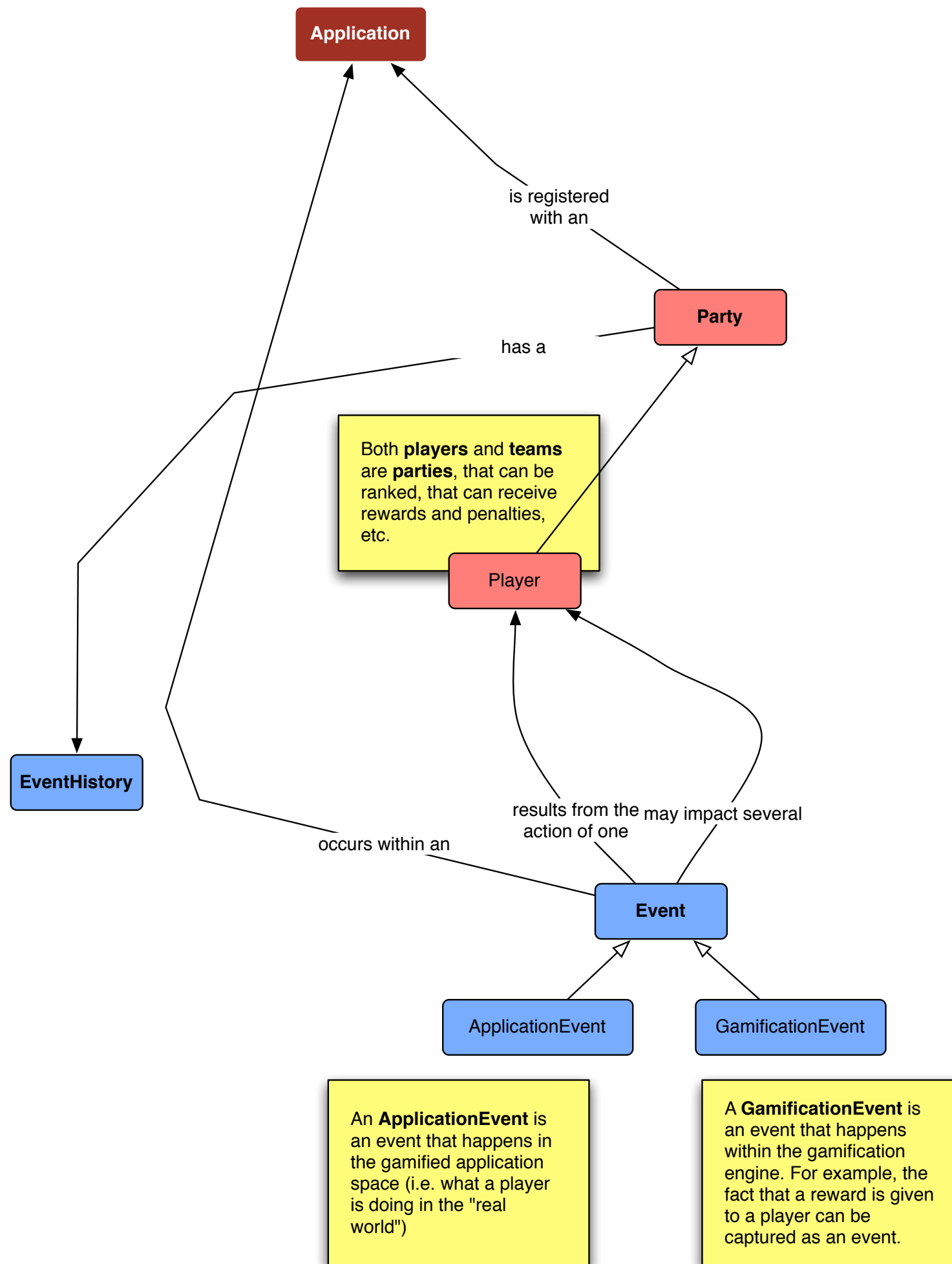
Team

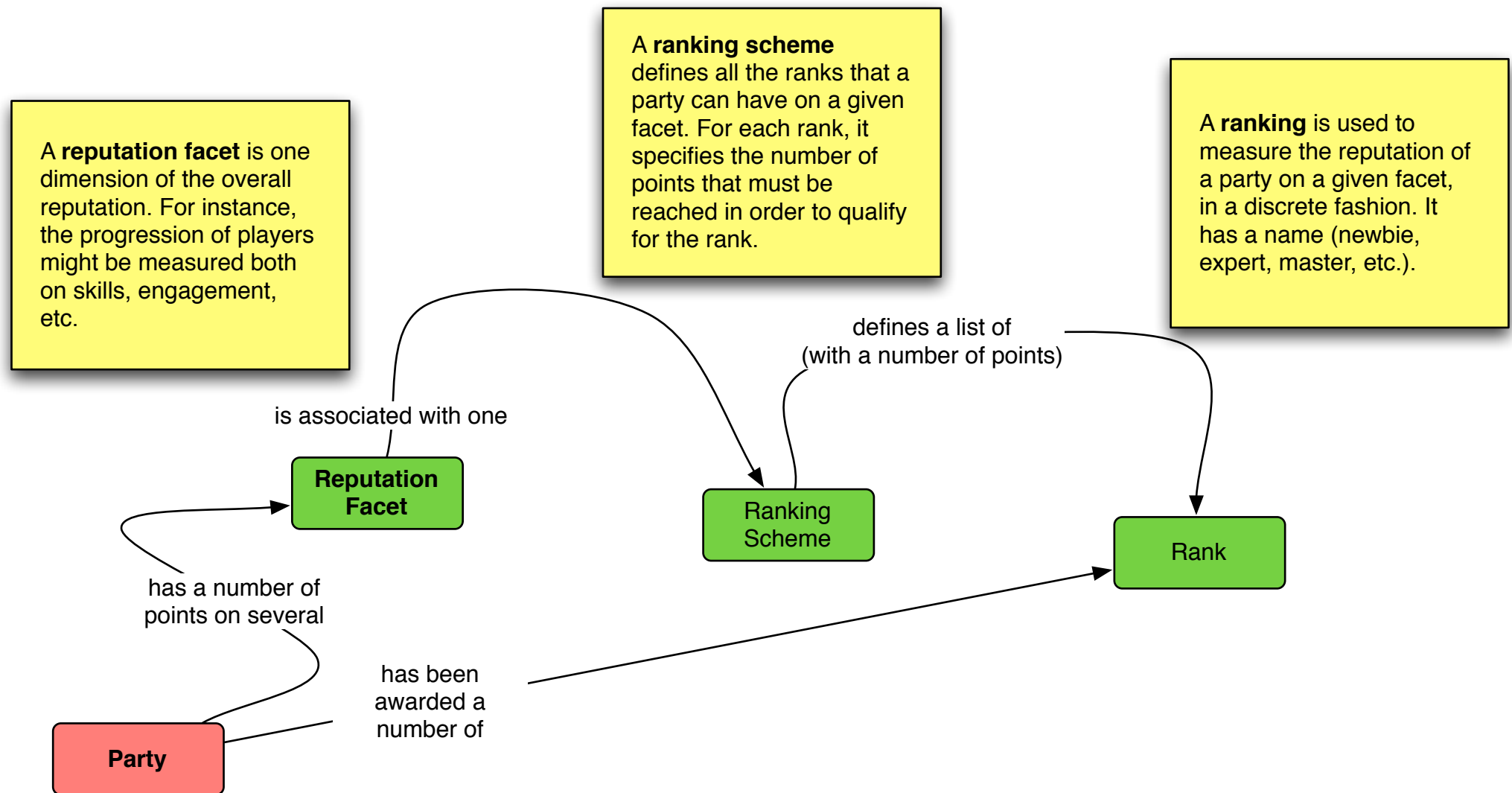
is made of several

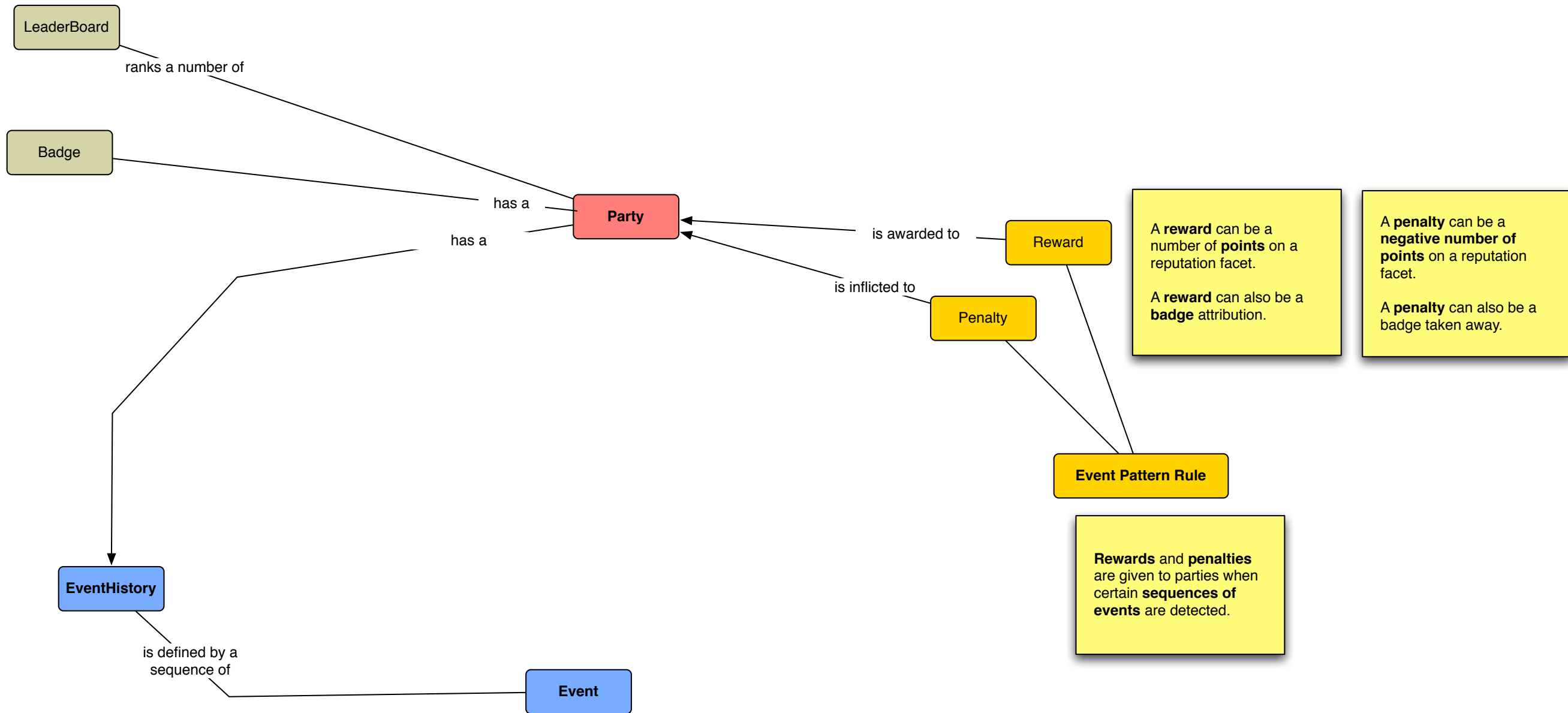
A **player** is a person who is active in the gamified application space.

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

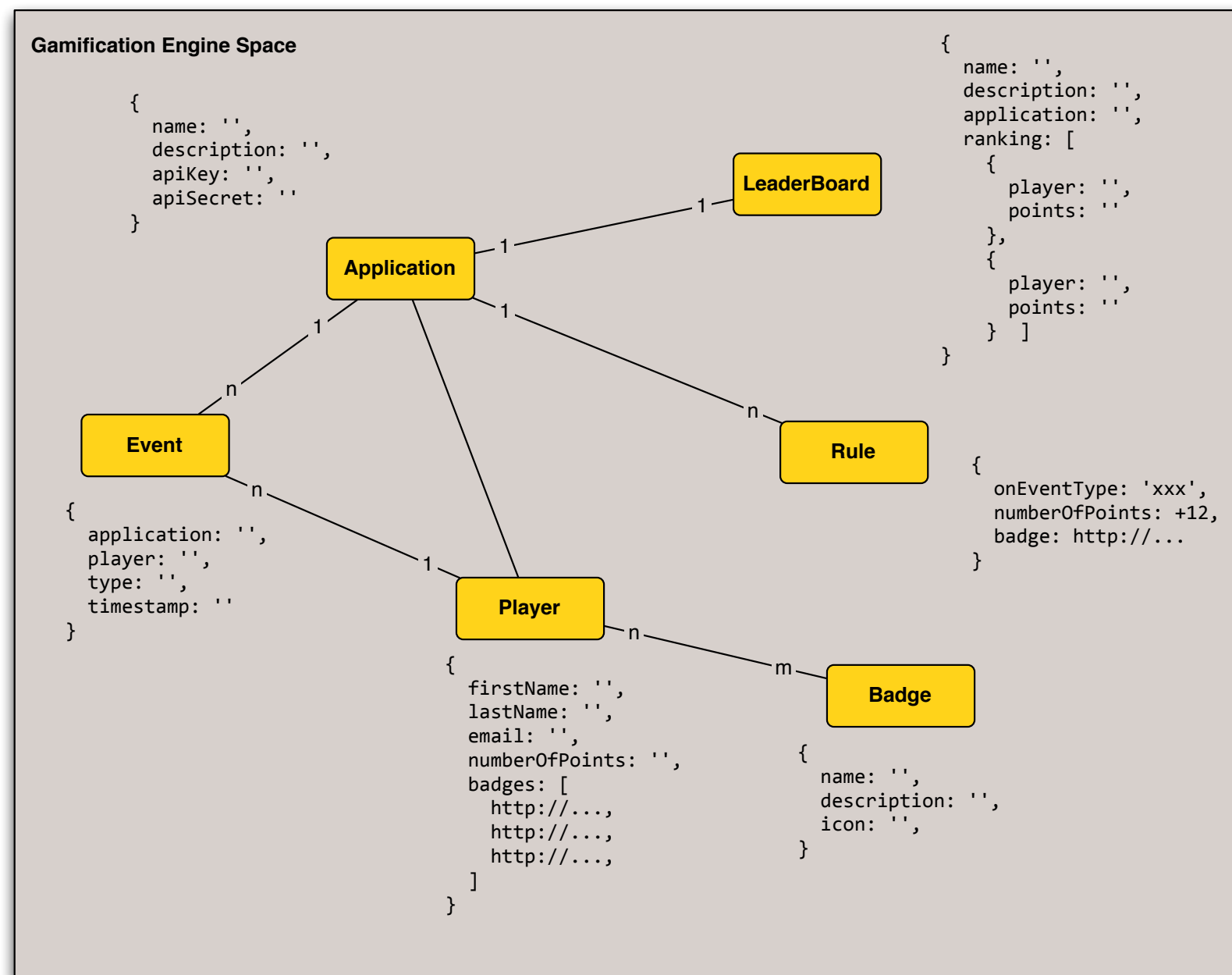
It is interesting to **rank players** within a team. It is also interesting to **rank several teams**.



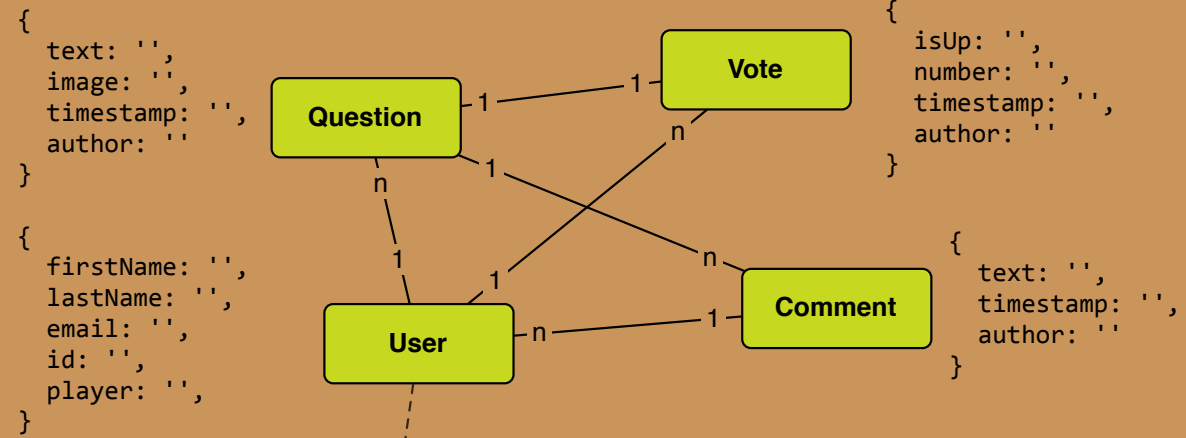




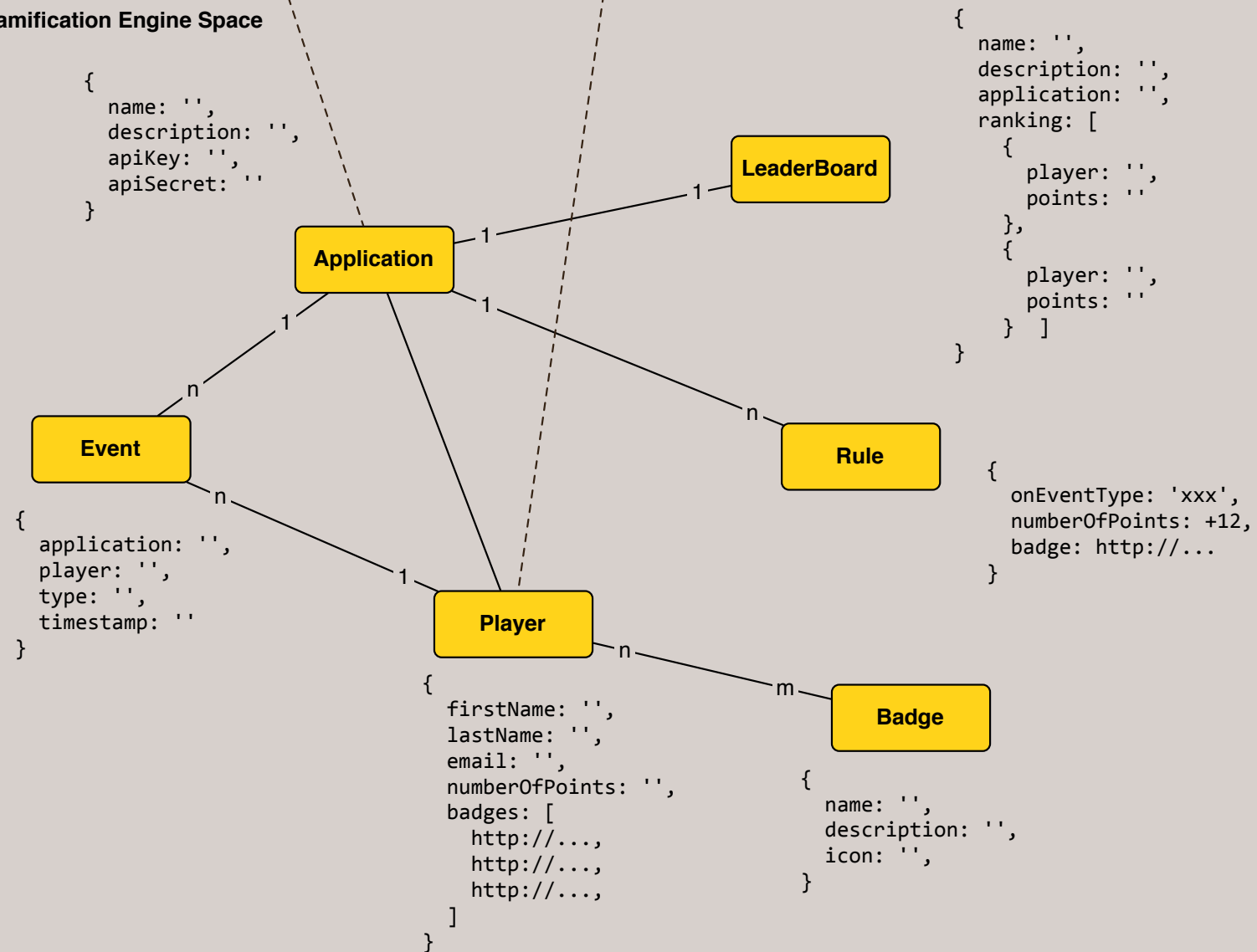
Gamification Domain Model (simple version)



Gamified Application Space

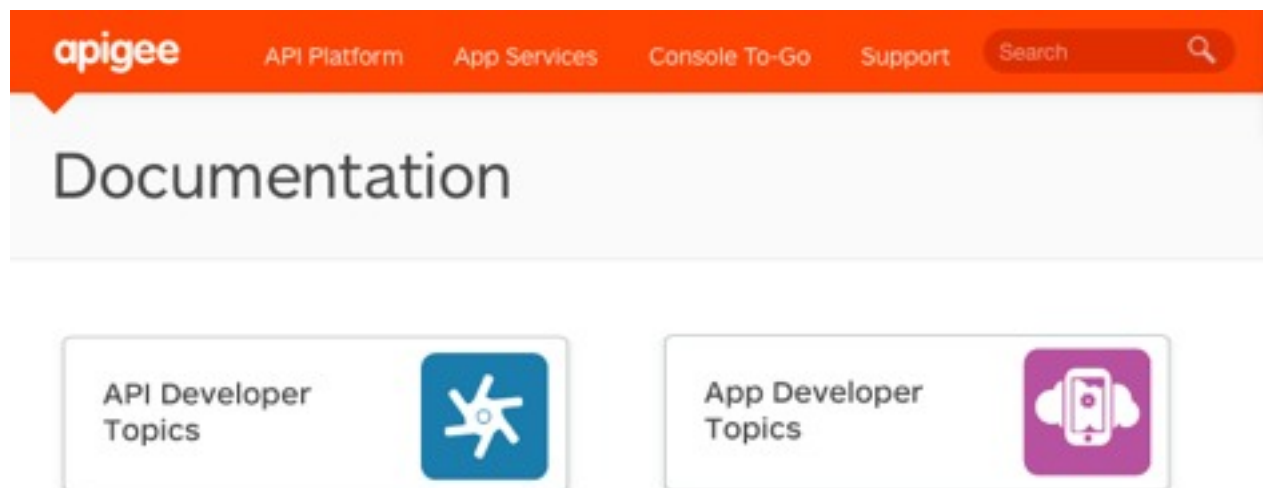


Gamification Engine Space



How should I specify/document my REST API?

Some Tools that Might Help/Inspire You



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

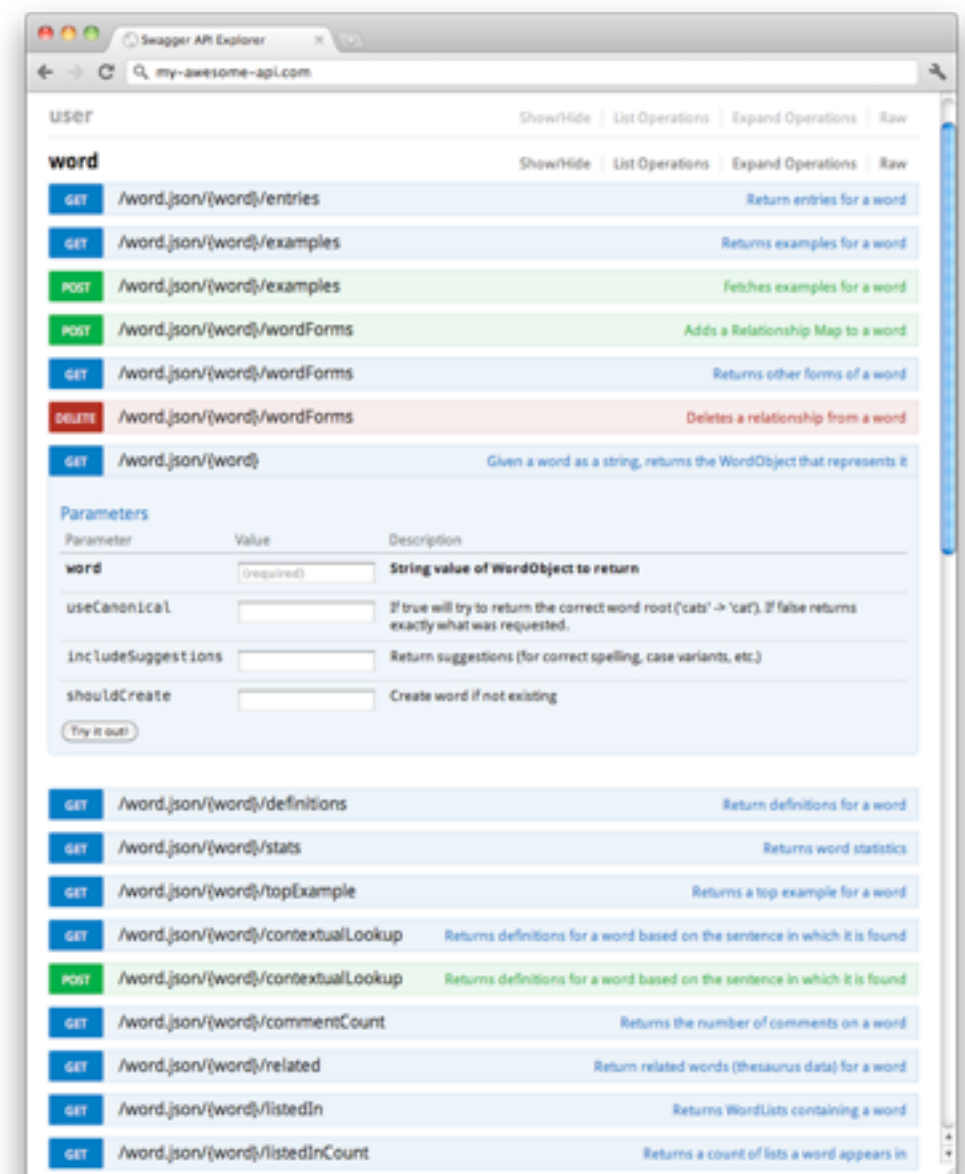


**REST API documentation.
Reimagined.**

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/>