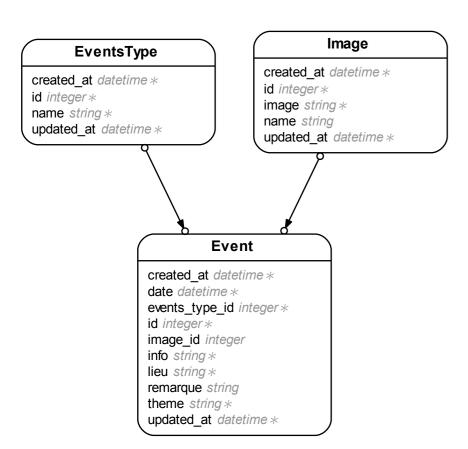Neurones domain model