Mappings

Information Integration: Homework

VGChartz

 $\forall id, g, c, pub, dev, s, y.$ vgsales $(id, g, c, pub, dev, s, y) \rightarrow \exists w.$ SoftwareHouse(pub, w) (1a)

 $\forall id, g, c, pub, dev, s, y. \mathbf{vgsales}(id, g, c, pub, dev, s, y) \rightarrow \mathbf{Publisher}(pub)$ (1b)

 $\forall id, g, c, pub, dev, s, y. \mathbf{vgsales}(id, g, c, pub, dev, s, y) \rightarrow \mathbf{publish}(pub, g)$ (1c)

 $\forall id, g, c, pub, dev, s, y. \mathbf{vgsales}(id, g, c, pub, dev, s, y) \rightarrow \mathbf{Developer}(dev)$ (1d)

 $\forall id, g, c, pub, dev, s, y.$ vgsales $(id, g, c, pub, dev, s, y) \rightarrow$ develop(dev, g) (1e)

 $\forall id, q, c, pub, dev, s, y. \mathbf{vgsales}(id, q, c, pub, dev, s, y) \rightarrow \mathbf{Console}(c)$ (1f)

 $\forall id, g, c, pub, dev, s, y.$ vgsales $(id, g, c, pub, dev, s, y) \rightarrow \exists ge.$ Videogame(g, ge) (1g)

 $\forall id, g, c, pub, dev, s, y.$ vgsales $(id, g, c, pub, dev, s, y) \rightarrow \exists us, cs.$ releasedFor(g, c, us, cs, s, y) (1h)

Gamedev

$$\forall x, y, n, t, ci, co, w. \mathbf{gamedev}(x, y, n, t, ci, co, w) \rightarrow \mathbf{SoftwareHouse}(n, w)$$
 (2a)

$$\forall x, y, n, t, ci, co, w. \mathbf{gamedev}(x, y, n, t, ci, co, w) \land (t = "publisher") \rightarrow \mathbf{Publisher}(n)$$
 (2b)

$$\forall x, y, n, t, ci, co, w. \mathbf{gamedev}(x, y, n, t, ci, co, w) \land (t = "developer") \rightarrow \mathbf{Developer}(n)$$
 (2c)

$$\forall x, y, n, t, ci, co, w.$$
gamedev $(x, y, n, t, ci, co, w) \rightarrow$ locatedIn (n, ci, X, Y) (2d)

$$\forall x, y, n, t, ci, co, w. \mathbf{gamedev}(x, y, n, t, ci, co, w) \to \mathbf{City}(ci)$$
 (2e)

$$\forall x, y, n, t, ci, co, w. \mathbf{gamedev}(x, y, n, t, ci, co, w) \rightarrow \mathbf{hasCountry}(ci, co)$$
 (2f)

$$\forall x, y, n, t, ci, co, w. \mathbf{gamedev}(x, y, n, t, ci, co, w) \to \mathbf{Country}(co)$$
 (2g)

Corgis

$$\forall t, g, p.\mathsf{spvg}(t, g, \dots, p, \dots) \to \mathsf{SoftwareHouse}(p)$$
 (3a)

$$\forall t, q, p.\mathbf{spvg}(t, q, \dots, p, \dots) \to \mathbf{Publisher}(p)$$
 (3b)

$$\forall t, g, p.\mathbf{spvg}(t, g, \dots, p, \dots) \to \mathbf{publish}(p, t)$$
 (3c)

$$\forall t, g, p.\mathbf{spvg}(t, g, \dots, p, \dots) \to \mathbf{Videogame}(t, g)$$
 (3d)

Metacritic

$$\forall t, g. \mathbf{datagenreX}(t, g) \to \mathbf{Videogame}(t, g)$$
 (4a)

$$\forall t, us, ms, p, r. \mathbf{metacritic}(t, us, ms, p, r) \to \exists ge. \mathbf{Videogame}(t, ge)$$
 (4b)

$$\forall t, us, ms, p, r.$$
 metacritic $(t, us, ms, p, r) \rightarrow \exists s.$ releasedFor (t, p, us, ms, s, r) (4c)

$$\forall t, us, ms, p, r. \mathbf{metacritic}(t, us, ms, p, r) \to \mathbf{Console}(p)$$
 (4d)

eSport data

$$\forall g, r, ge, te, oe, pp, tt. \mathbf{generalED}(g, r, te, ge, oe, pp, tt) \rightarrow \mathbf{Videogame}(g, ge)$$
 (5a)

$$\forall g, r, ge, te, oe, pp, tt.\mathbf{generalED}(g, r, te, ge, oe, pp, tt) \to \mathbf{eSport}(g, te, oe)$$
 (5b)

$$\forall d, g, e, pp, ne.$$
historical $ED(d, g, e, pp, ne) \rightarrow Tournament(d, e, pp, ne)$ (5c)