

APPENDIX B

Example of PDDL Domain

```

(define (domain collabGame)
  (:requirements :typing)
  (:types player poi obstacle item switch - object
    mage warrior inventor - player
    rollable door jump barrier enemy - obstacle
    gear rune - item
    step lever machine doble triple - switch
  )
  (:predicates (player-at ?p - player ?x - poi)
    (player-distinct ?p ?r - player)
    (enemy-at ?e - enemy ?x - poi)
    (enemy-edge ?e - enemy ?x ?y - poi)
    (item-at ?x - item ?y - poi)
    (switch-at ?x - switch ?y - poi)
    (route-to ?x ?y - poi)
    (route-block ?x ?y - poi ?z - obstacle)
    (luring ?m - mage)
    (blocked ?x - obstacle)
    (open ?x - obstacle)
    (player-inventory ?p - player ?y - item)
    (linked-switch ?x - switch ?y - obstacle)
    (door-rune ?x - door ?y - rune)
    (door-route ?x ?y - poi ?z - door)
    (machine-gear ?x - machine ?y - gear)
    (machine-loaded ?x - machine)
    (switch-on ?s - switch)
    (item-assign ?i - item ?p - player)
    (switch-assign ?s - switch ?p - player)
    (rollable-locked ?r - rollable)
    (rollable-open ?r - rollable)
  )
  (:action move
    :parameters (?p - player ?x ?y - poi)
    :precondition (and (player-at ?p ?x)

```