StrictPreference

- voter: Voter

- pref: List<Alternative>

PSRWeights

- weights: List<double>

PartialPreference

- voter: Voter

+ pref: Graph<Alternative>

+ getPref: Graph<Alternative>

ConstraintsOnWeights

+ constraints ?

PrefKnowledge

+ weights: ConstraintsOnWeights

+ pref: ImmutableMap <Voter, PartialPreference>

+ getPref: ImmutableMap<Voter, PartialPreference>

<<Interface>>
Strategy

+ k (numberOfQuestions) : int

+ getQuestion(pk:PrefKnowledge): Question

Oracle

- weights: PSRWeights

- pref : Map < Voter, StrictPreference>

- alt: Set<Alternative>

+ isYes(q:Question):boolean

StrategyMiniMax

use the Regret to get the next Question

StrategyNaive

ask questions to the commitee first and to the voters after

StrategyRandom

ask random questions

Regret

+ getPMR(a,b,P,W): double

+ getMR(a,P,W): double

+ getMMR(P,W): double

<<Interface>>
Question

+ t : QuestionType

<<Enumeration>>
QuestionType

Voter
Committee

QuestionVoter

+ i : Voter

+ a : Alternative

+ b : Alternative

QuestionCommittee

+ $\lambda \geq 1$: Aprational (n/d)

+ rank ≥ 1 : int
($w\_rank - w\_rank+1$) $\geq$
λ ($w\_rank+1-w\_rank+2$)