

1 Data models

We currently use five models as described below.

1. **Maximal absolute lack** finds the competence that has the biggest absolute difference.

$$\max_{\text{competences}} \{|\text{competence score} - \text{required competence score}|\}.$$

2. **Maximal relative lack** finds the competence that has the biggest relative difference.

$$\max_{\text{competences}} \left\{ \left| \frac{\text{required competence score}}{\text{competence score}} \right| \right\}.$$

3. **Most important competence that lack** finds the competence that has the biggest required competence score and isn't satisfied.
4. **Improve competence by formula** finds the competence that should be improved using weights.

$$\max_{\text{competences}} \{|\text{required competence score} - \text{competence score}| \cdot \text{competence weight}\}.$$

5. **Importance over number** finds the competence that should be improved that is bigger than the given number. It determines which competence should be improved using one of previous models.

The names and algorithms for data models are a subject of change.

2 User interface

The current python code comes with a user interface. It can be used by running the `userInterface.py` file.