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**Reference: QSE:CIS Adapter**

**Topic: Collective Intelligence Analytics: Development of Adapters for the CIS Insights Platform**

LVA-Type: Bachelor's Thesis, (MSc) Project in SE and Internet Comp.

Start: As soon as possible

End: By arrangement

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**Background**

Collective Intelligence Systems (CIS) like Wikipedia or GitHub are effective platforms to collect and distribute knowledge among large communities. In order to improve the aggregation and dissemination capabilities of a CIS, data about its network and performance is needed. Therefore, the CIS Insights analytics platform provides CI-specific metrics and statistics for a variety of platforms. The extendibility of CIS Insights to the different platforms is realized by using adapters for (1) data import, (2) data export, (3) data analysis and (4) reporting.

In this work the goal is to develop one or more CIS Insights adapters for a particular platform like MediaWiki, Atlassian Jira, or internal prototype platforms. The student learns about the design and development of data analytics platforms in the domain of CIS using state-of-the-art web engineering technologies.



**Tasks**

- Goal is the exploration, design, technical planning and development of adapter modules.
- Basic parts include:
  - o Analysis of system that should be analyzed (REST API, data model).
  - o Design and documentation of adapter solution.
  - o Implementation of adapter(s) using Python, Django and additional libraries.
  - o Testing and quality assurance of the created solution.

**Experience and skills needed/recommended:**

- Python / Django
- Basic experiences in data modelling and databases (e.g. mySQL, postgreSQL).
- Basic experiences with REST and JSON.
- Experience / interest in Social Web, Crowdsourcing, Collective Intelligence and Data Analytics.
- Good written and spoken English skills.
- Experience with Git.