Development of a Parameter Identification Application

Introduction
Complex structural dynamic models of machine tools have proven to be very useful for condition monitoring, process planning and stability analysis. However, their parametrization is still a challenging task which requires a comprehensive set of reference measurements, identification algorithms and an elaborate identification strategy.

Objective
Within this IDP, an application is to be developed which demonstrates the parameter identification process for education and marketing purposes. For this, a frontend is to be designed and implemented, which can flexibly work with several existing and future backends for data generation, machine tool modeling and parameter optimization. For compatibility reasons, the application is to be implemented in Python.

Requirements
- Interest in structural dynamic models
- programming skills in Python
- experience in frontend development
- fluent use of German and English

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