Automatised visualisation of the Cordier diagram

Description:
The Cordier diagram represents a universally valid relationship between flow rate, pressure drop, runner diameter and runner speed of a fluid-flow machine. Later contributions to Cordier's theory suggest that there is not only a single Cordier curve, but rather a set of curves at which all design points of a fluid-flow machine are located depending on their flow rate and operating pressure. The target of this project is to write a software that visualises the Cordier diagram and automatically computes all relevant dimensionless numbers.

Key features:
- Digitalization of Cordier diagram
- Automatized calculation of dimensionless numbers relevant for fluid-flow machinery
- Visualization of the design point of a fluid-flow machinery in the Cordier diagram

Desired skills:
- Programming skills (preferably Python or Matlab)
- Basic knowledge of fluid-flow machinery would be helpful

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