# Concepts

Following, I will explain the main concepts and acronyms used in my research question and in the course of the present thesis.

### Documentation Portals

Documentation portal is a rather broad concept, even if I limit it to the use in technical documentation.

### Other Words for Documentation Portal

In technical communication, documentation portals are also known as content delivery portals, content delivery systems, CDP, information portals, documentation platforms, documentation hubs, self-help portals and more. They are software products for mobile and desktop devices used by various professional and non-professional user groups.

### Characteristics of Documentation Portals

In this research, I will consider documentation portals that serve documentation for several physical products in one application for one or more user groups.  
The purpose of these documentation portals is to dynamically deliver technical documentation to various ends on request.  
Content modules, their size, relationships and capabilities characterize these documentation portals and are related to my research.  
Content comes from one publisher, e.g., from one company, as opposed to a search engine.

### Documentation Portals Not Considered in this Research

I will not consider software applications that serve static documents only, where content modularization by definition does not play a role.  
Furthermore, I will not consider product centered software applications, like digital twin applications since they do not put the technical documentation in the center of the application and come with different requirements.  
I will not consider documentation applications that serve the technical documentation of one specific instance of a product, for example, an application serving all the user documentation for a person's car.

### Content Creation or Documentation Creation

In this thesis, I will define content creation and the creation of technical documentation very broadly. It includes researching and understanding the user and forming content according to user needs, beyond writing by structuring and classifying it in preparation to content delivery. However, a delivery process that employs for example an ontology based in use cases that will determine the documentation portal, independently of the content structure, is not considered a part of the content creation. In contrast, a taxonomy that is leveraged to pre-annotate content to train a model for automatic content tagging can be found back in the search function of a documentation portal on content delivery and is therefore considered to be part of the content creation process.

### Classification and Modularization of Content

Classification and modularization in this thesis refer on the one hand to the activity of tagging content with content classes and determine the size of the information units to be tagged, and on the other hand to the state of the content being tagged with classes and divided into information units of a certain size. Modularization is an inherent part of conventional content classification since a decision must be made about the size of the information unit to be tagged.

### Content Classes, Modules, Module Size

In this thesis, a content class is a structural element of a text unit or information unit that is machine-readable, and which makes the text unit identifiable and selectable, such as metadata. A module in this thesis refers to a text unit or other information unit, while not necessarily the smallest one. In conventional systems, it would refer to a so-called self-contained topic. Its size can for example be expressed as word count. In this thesis, a module is not limited to an aggregation of several information units into one module but can also be one granular base unit.

### User Experience

When users interact with an application, such as a documentation portal, users experience various pragmatic and hedonic aspects of this activity. These aspects can be seen as qualities of the experience users have from the interaction, wherein the experience is not limited to the time of the interaction or the presentational layer of the application. Aspects of content in documentation portals such as findability or context provision are expected to influence user experience aspects such as perceived ease of use, value or credibility. I derived this conceptualization of user experience for the present thesis from several sources, for example from Schrepp [-@Schrepp2019] and Norman [-@Norman2013], as the most relevant part of the multi-facetted concept of user experience.

### Technical documentation

Information products in technical communication, such as product information, also known as technical documentation, can consist of information for use of a product range for specified users and collateral information (administrative, design, compliance or market research information, metadata, data, for example) [@EU-BlueGuide]. The user-dependency of technical documentation content is multidimensional. A horizontal dimension includes a user range that relates to a product's life cycle (installation, operation, administration, maintenance). A rather vertical dimension includes a user range that relates to skills (rookie, expert) and yet another dimension to the user role (end-user, retailer, purchaser), for example.

### Acronyms

IR = information retrieval  
CDP = content delivery portal  
UX = user experience  
CCMS = component content management system  
UI = user interface  
AI = artificial intelligence