



Figure 1: An example of a specification of a reusable ostis-systems component

**Figure 2. An example of a specification of a reusable ostis-systems component** of the manager of reusable ostis-systems components contains the full specification for the manager of ostis systems components, the requirements for the component manager, its functionality, the specification of the implementation option for the manager of ostis-systems components, including the sc-model of the knowledge base, the problem solver, and the interface. V. Architecture of component manager and library of reusable components of ostis-systems To install reusable components of ostis-systems it is necessary to have a special subsystem in the system: a manager of reusable components of ostis-systems. The component manager interacts with the user and with the library of reusable components. To clarify the specifics of such interaction, diagrams are developed and SC constructions necessary to initiate actions when working with the component manager are depicted. Fig. 3 shows the entity-relationship diagram for the component manager, describing the current state of the component manager functionality. The diagrams (Fig. 3

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requirements.txt
1 py==1.8.1
2 pip==19.0.3
3 Make==1.1.1
4 MarkupSafe==1.1.1
5 six==1.14.0
6 attrs==19.3.0
7 pytest==5.3.5
8 pluggy==0.13.1
9 setuptools==40.8.0
10 parse==1.14.0
11 glob2==0.7
```

Figure 2: pip configuration file

and Fig. 4) use the following. – Reusable component — Reusable component of ostis-system;– (Reusable) component specification — Specification of reusable component of ostis-system;– Storage (GitHub) — A repository of components and specifications, such as GitHub;– Other library — a third-party library of reusable components. • relationship– update;– use;– subsystem;– search;– connect;– store;– link;– installation. • attributes– OSTISMetasystem library — OSTIS Metasystem library of reusable components of ostis-system;– OSTIS Metasystem manager — OSTIS Metasystem manager of reusable components of ostis system;– search arguments — search arguments for reusable components Component Library is a library of reusable components of ostis-systems, which is a subsystem of them. The library's knowledge base is a repository of reusable component specifications, and the library also provides an interface to visualise and manage component specifications of the user's system. Component Manager — is a reusable component manager for ostis systems that is a subsystem for installing, downloading, and tracking components and their specifications for both the user's system and other systems that store reusable components. The entity-relationship diagram for the component manager from the point of view of the ostis-system user on the example of the OSTIS Metasystem Library (Fig. 3) contains the following information.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$