Reference: https://en.wikipedia.org/wiki/Software\_design\_description

The SDD should contain the following information:

1. Cover page (as described previously)
2. The [*data design*](https://en.wikipedia.org/wiki/Data-driven_design) describes structures that reside within the software. Attributes and relationships between [data objects](https://en.wikipedia.org/wiki/Data_object) dictate the choice of [data structures](https://en.wikipedia.org/wiki/Data_structures).
3. The [*architecture design*](https://en.wikipedia.org/wiki/Software_architecture) uses information flowing characteristics, and maps them into the program structure. The transformation mapping method is applied to exhibit distinct boundaries between incoming and outgoing data. The data flow diagrams allocate control input, processing and output along three separate modules.
4. The [*interface design*](https://en.wikipedia.org/wiki/Interface_design) describes internal and external program interfaces, as well as the design of human interface. Internal and external interface designs are based on the information obtained from the analysis model.
5. The [*procedural design*](https://en.wikipedia.org/wiki/Procedural_design) describes structured programming concepts using graphical, tabular and textual notations. These design mediums enable the designer to represent procedural detail, that facilitates translation to code. This blueprint for implementation forms the basis for all subsequent software engineering work.
6. Breakdown of individual contributions
7. Key Personnel information

Each procedural component should include one section devoted to the detailed description of the component

* Introduction/Purpose of this Component/Entity
* Input for this Component/Entity
* Output for this Component/Entity
* Component/Entity Process to Convert Input to Output
* Design constraints and performance requirements of this Component/Entity
* Process (pseudo-code algorithm)

The product to be produced is a I expect a system specification.  
  
You should be able to pass the document off to another team of very junior programmers and they could build that system.  
  
All programs should be described in detail, list all major methods/routines and the English one sentence description of each method/routine. And all should be very computable (no magic occurs here).  
  
The database (or all data store) should be described  at the ER Diagram level.  
  
Products for hardware platform, database and language for all programs should be specified.

Also, this report should be posted to the team website.

Portions of previous assignments can be used within this document in appropriate sections.

Note: Portions of this document are from <https://en.wikipedia.org/wiki/Software_design_description> .