**Client**

Using one single instance of the application server or clustered? Microservices?

What kind of client? Browser? Mobile phone? Java program on client computer?

Shall caching be used? What kind of caching? Browser, proxy, gateway?

**Presentation layer**

How shall navigation be performed, what calls to the model should be made and which is the next view? Static, dynamic?

How shall validation of user input be made?

How shall flow control be used?

How shall the view be separated into different parts? Header, footer, navigation…

Shall it be possible to switch language and add new languages? How?

How are sessions managed?

Which component is responsible for showing error messages?

Which component is responsible for logging error messages?

What information shall be logged and what shall be shown?

How does information arrive to those components?

How shall authentication, authorization and logging be handled? Servlet container?

**Business layer**

Should the model retain state, that is should the result of one call still be present in the model when the next call is made?

When to synchronize with the database?

What exceptions should be reported to presentation layer?

Which component is responsible for showing error messages? How does it arrive? What shall be logged?

How shall error messages be internationalized?

Should presentation and business be in the same or separate processes? EJB calls local or remote?

How shall security be handled in the business layer?

What data shall be used for communication with presentation? DTOs?

When should transactions start and stop?

What transaction isolation should be used?

Do we need transactions when we read data? When we write data? When we read-update-write

data?

Which type of transaction propagation do we use?

**Integration layer**

Shall it be possible to change DBMS without updating the business logic?

How are relations, inheritance and other object oriented paradigms mapped to the database?

How are private keys generated and how do we ensure they are unique?

What data shall be used for communication with business?

May the business logic objects themselves be used?

How shall locking be used?

Shall lazy loading be used?