Software Conceptual Design
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Lecture - 23
Mapping
Function-Behaviour-Structure to the Software Development Process

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In week 2, we introduce the Function Behaviour Structure design framework. The function corresponds to the functionalities and features of the solution designed. Its structures correspond to the physical and logical components of the solution. The mechanism in which the structures interact to achieve the functionality is termed as behaviours.

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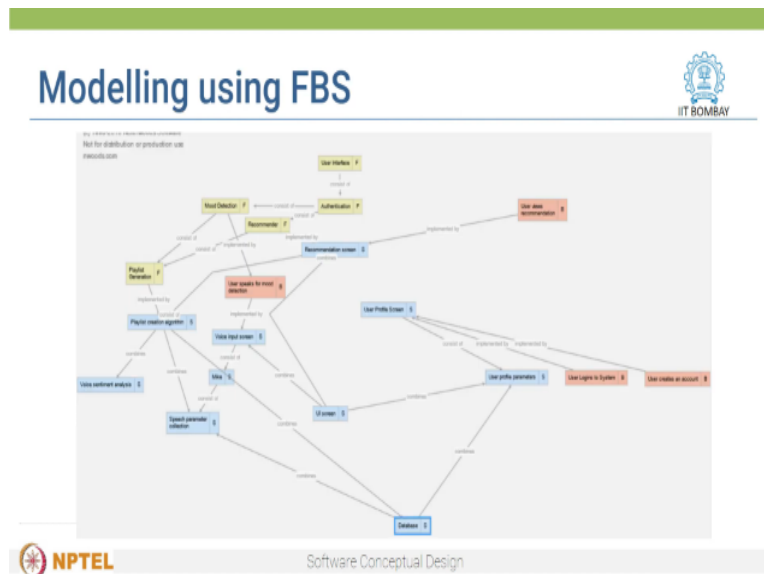
We then created an FBS graph which was an integrated model of the solution design. We use the think and link learning environment to create and evaluate FBS graphs for different software design problems. In week 2 we created FBS to the software design solutions, but I am just wondering how does this map to the software processes and the development models that we just discussed in week 1?

That is a good question, actually, there is a mapping of the various processes like requirement definition, design, implementation, testing, deployment, do the function structure behaviour framework? So how is this mapping actually done, can you please explain?
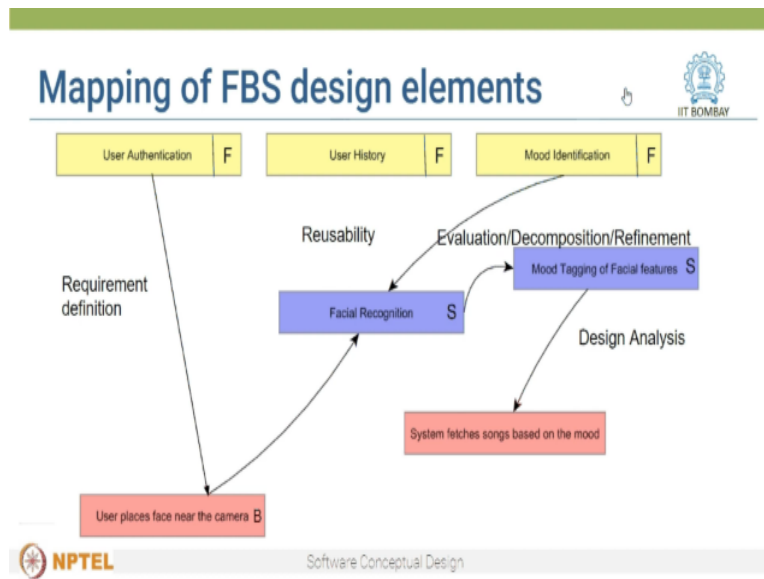
While mapping the FBS design elements, certain software processes get initiated. For example, when the function is mapped to a behaviour requirement definition process gets initiated when a structure is mapped to a behaviour, the design analysis process gets initiated. So on and so forth, certain doors while mapping the software process gets initiated.

In this table, we see the different software engineering processes getting initiated while the FBS design elements are mapped to each other.