**Eggshell Home Builder: Case Description**

**Background:**

The company Eggshell is a local home builder that mainly builds midsize subdivision style houses. The sales have been going well with about 80 open contracts and a single full-time sales agent is currently responsible for most of the paperwork. The owner wants to migrate this paperwork to a computer system to make it manageable and make the information accessible to interested buyers via a website.

**Subdivisions, Lots, and Styles:**

Each subdivision is divided into lots, each lot has a specific house style already assigned to a subdivision. Each lot is numbered and has an address given by the U.S. Post office.

Buyers select lot and house, and to have some variety, buyers can choose the elevation type for their house, each with a slightly different exterior. Additionally, buyers can opt to have their house constructed as shown in the picture, or have it reversed. Other information that Buyers are interested in knowing is the map of the subdivision and the school district of which the subdivision is part of.

**Buyer Options and Construction Stages:**

A challenging part for buyers is deciding the options for each house. To minimize costs, the builder provides a limited number of options from which the buyers can choose. The options are divided by categories like Electrical, Interior design, etc.

The construction process is divided into 7 stages, but the buyer is only aware of 3 stages. It is easier from a construction standpoint to have all options selected earlier, but his process is still error-prone, as buyers will want to change their options at a later stage based on their preference.

However, some choices should be made before a certain stage in the construction process, while the other choices have different costs based on when the choices are made. Generally, the cost of choice increases with the stage at which it is made since it might involve some rework. The sales or design representative is responsible for choosing the correct price, as the prices change based on stage.

A construction manager is responsible for monitoring construction progress. Sometimes sales reps may keep track of the progress to update the buyers. The corporation wants to keep track of the latest construction progress like the overall process and estimated time of completion to directly update the buyers via the website.

**Legal Agreement and Sales:**

The initial sale of the house involves buyers writing a check for the escrow amount, with details of house and lot being recorded. There is a time limit of one year from signing the contract before which the house construction must be completed, or the buyer can cancel the contract. The buyer also needs to obtain a loan for the house, and the bank details are also recorded. The final paperwork is all done offline since it requires manual processing.