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What are the three benefits of incremental development, compared to the waterfall model? (50 pts)

1. **Changes of Bargain is lower than water fall model**
   Repeated analysis and evaluation in incremental development are not as much as the waterfall model. The documentation is also lower. Phases in the waterfall model are separated, and after one-step passes, it is hard to return to the previous stage, and it costs more than expected to return to the last phase. However, in incremental development, the cost of accommodating changing customer requirements is more satisfying.

2. **Repeated feedback from the customer**
   In incremental development, we can get customer feedback at every step, and it is easier to understand how much the customer is satisfied with it. Customers can see the software's grades and implementation and give feedback. Therefore, the waterfall model is not working well when the requirements and customer satisfaction are poorly understood.

3. **Faster and efficiently delivery to the customer**
   The incremental development is flexible partitioning. Customers can see all the steps. Therefore, this makes it easier for the customer to see how much the software is impalement, and it is possible to obtain an advantage from the software. Most of the business and project requirements are unknown. Customers can check these requirements. Moreover, after we passed one step and matched with the customer, we needed some criteria in the previous steps. So, the incremental model can help us progress our project more efficiently and quickly.

The university has decided to add new functionality to its undergraduate application system that is currently running as a web hosted system. The new functionality is supposed to offer an additional new module, to allow applicants connection to their social media, FaceBook, for committee reviews in acceptance or rejection. With this brief description of additional component, what is your recommended generic process model to use and why? (50pts)

The connection to social media, including Facebook, Instagram, and Twitter, is substantial, and we must deal with many sub-phases. Therefore, the only model, which is helpful for large systems, is the **waterfall**. The separate identified phases in the waterfall model can help us to understand each stage better and finish each step, move forward to another location, partition our large project, and work on it very well. The first phase, **requirements analysis**, can help us know all the needs and expectations for connecting the website.

We don't need to make any changes to our prospective model caused our model is independent, and the steps are clear and straightforward. This model can help us to go through all the other steps, including **system and software design**, **implementation and unit testing**, **integration and system testing**, and **operation and maintenance**.

We don't need incremental development. Also, we don't choose the integration and configuration because this system is not assembled from existing configurable components in this model. Overall, the waterfall model can help the university easily access the scheme.