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Software Engineering LAB 1

A. For a simple data processing project with well-defined requirements, the Waterfall Model is suitable. Due to the straightforward nature of the project, customers can easily comprehend it.

B. To develop a data entry system for computer beginners, where user-friendliness is crucial, the Prototyping Model is appropriate. Creating prototypes and refining them based on user feedback will meet the needs of novice users.

C. Developing a spreadsheet system with some basic features and additional desired features can be accomplished using a combination of the Waterfall Model and Incremental Model. The Waterfall Model will handle the initial predefined requirements, while the Incremental Model will facilitate adding new features and making changes.

D. The Agile model is recommended for a web-based system for a new business with rapidly changing requirements and an in-house development team. Agile's iterative approach allows for continuous development, quick updates, and customer involvement.

E. Creating an online store website with numerous desired features and frequent updates can benefit from using the Incremental and Prototyping Model. The Incremental Model allows for adding features quickly, while the Prototyping Model ensures a better customer experience.

F. Implementing an anti-lock braking system in a car is best managed using the Waterfall Model. This safety-critical feature requires thorough analysis and design before implementation.

G. Developing a virtual reality system to support software maintenance is well-suited to the Incremental Model. The ever-changing system requirements can be efficiently accommodated through incremental development.

H. To build a university accounting system that replaces an existing one, the Waterfall Model is the right choice. Predictable requirements can be met effectively using this model.

I. Designing an interactive system for railway passengers to find train times would benefit from the Prototyping Model. Its quick delivery and focus on crucial features align well with changing user needs.

J. Creating software for a missile guidance system with precise target identification calls for the Waterfall Model. The government-funded project requires meeting all predetermined specifications.

K. Making emergency changes to systems before approved requirements necessitate using the Incremental Model. It allows for modifications to be accommodated promptly.

L. Developing software for ECG machines should follow the Waterfall Model. The safety-critical nature of ECG machines demands precise analysis and design.

M. For a small-scale, well-defined project with fixed requirements, the Waterfall Model is suitable. It enables efficient development without the need for a large team.