Beet Seed — get the basic skills down.

1. Make a comparative table of the most common methodologies:

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| № | Name of the methodology | Pros | Cons | For which industry is it appropriate |
| 1 | Waterfall |  |  |  |
| 2.. |  |  |  |  |

In your answer, support your opinion on why a given strength/weakness/appropriate field of application is proper for the methodology.

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| Methodology | Pros | Cons | Industry |
| Waterfall | -Simple steps to follow. The team has to follow each step  -Specific milestones. Each phase is a milestone | -Limitations of flexibility as we can’t go back to the previous stage  -Feedback is given in the final stage | Health industry/Aeroplanes because the requirements are specific and the final product is really important to be delivered with no issues |
| V-Model | Emphasis on testing as we test on each stage | -Need of more time to complete each step | Industries with strict documentation that the product needs to be tested again and again and presented with no bugs, like: automotive/healthcare |
| Iterative model | Flexible model to changes as its part is independent from the others | Need of good management, so it won’t be chaotic | Products that the requirements might change, during the development process |
| Incremental model | Early delivery of product in its first version  -ability to optimize the product with more versions | Might occur the possibility some modules or functions to be dependable from others | Large projects that might need continuous delivery of new features like mobile apps or game industry |
| Spiral model | -Good for projects with high risk as risk assessment takes place after each iteration  -allows adjustments which helps to improve the product | -needs more time  -need of good knowledge of how to prevent risk | Critical services like financial industry where changes might occur and the risk is huge |
| Scrum | -Time management  -Team members involved in all stages and have specific roles | -Good coordination and cooperation of the team  -Each member needs to follow the steps, complete their work  -specific deadlines | Applications/marketing or advertising teams as they usually need to have specific deadlines to complete their tasks and move to next stages |

Beet Sprout— dive deeper into practice.

1. Complete the task of the previous level.
2. Write detailed answers (0.5-1 pages in volume) to the following two questions:
   1. In your opinion, why did the Agile manifesto appear?
   2. What problems did it have to solve and did it succeed?

The Agile Manifesto appeared in 2001 as a response to the challenges by traditional software development methodologies. A group of software developers recognized the need for more adaptable and flexible approaches, that lead them to the foundational principles and values that eventually shaped the Agile Methodology.

The primary objective of this new methodology was a more customer-centric practice, as one of its key principles says: "*Our highest priority is to satisfy the customer through early and continuous delivery of valuable software."* The Agile Manifesto, with its emphasis on customer satisfaction, acceptance of changing requirements, working solutions, and face-to-face conversations, was created to address the issues of the other existing methodologies.

The critical issues that needed resolution from prior methodologies included the lack of acceptance of changing requests, the absence of customer feedback within the Development Life Cycle, and the emphasis on tools and documentation rather than people and the final product.

The outcome was a methodology characterized by a customer-focused approach, adaptability, and flexibility, fostering significantly improved communication.

In my opinion, each development model has its significance, and the choice of the right approach should be tailored to the unique requirements of each project. Every company and team must carefully select the most suitable methodology for the specific context and goals of their projects.

Mighty Beet: get an all-round topics coverage by completing **level three** of the home assignment:

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| 1. Complete the tasks of the previous two levels. 2. You are the founder of a startup planning to launch a mobile application for sharing cat photos.   What methodology will you choose for the development process and why? Support your answer.  Write the answers in your Google Docs file for homework. |

In that case, I would choose the Agile Methodology and specifically the scrum framework. I believe that this approach would let me use specific sprints to complete my teams tasks and deliver small functionalities in every stage.

At the same time, I could focus on user’s feedback and as the specific process has an adaptability to changing requests, I could lead me team to adopt any necessary changes on the next steps of development and testing.

Also, each team member would have a specific role and would be aware of the time frames that each task should be completed. I believe this would create a clear communication environment and a good collaboration between team members.

Finally, this methodology is ideal for start up companies as gives the ability and time to manage any risks might appear, technological challenges and address the issues that might appear.