2) Why is project planning important?

First, there exist a project without a plan (one without clear objectives), and a poorly planned project (one with poorly defined scope); similarly, both cases will result in project failure. As the project grows, so do its processes and procedures, which become more complex over time, and worsens – if neither an effective methodology is used nor a suitable methodology is used properly. Although project planning may not eliminate such complexity, project planning can certainly prevent possible uncertainty from causing project failure by helping to identify potential risks as soon as they appear, reduce them, and ensure the project is headed in the intended direction. To be sure, project activities have to closely align with the project's scope that's defined in this planning phase. The project's scope takes into account the main requirements (functional, technical, and customer-centered) and the detailed specifications based off those requirements in order to simplify the workload into several mini work activities pertaining to each major requirement. Breaking down the project into small manageable tasks reduces burnout among project team members, including the project manager, by allowing them to work incrementally piece by piece and measure progress on the go. This makes the project team members more careful at spotting emerging risks, and more attuned to the project's main objectives. When attentive, the project manager is able to precisely evaluate the project's performance based on the collected measurement, and address the resulting quality when communicating with other involved stakeholders about the project status (along with risks and issues during a particular status period); and is able to come up with next steps to ensure the project continues to meet the project's scope, be on track, and complies with customers' expectations.

Project planning is also necessary to get the upper management to buy into the project by gradually helping upper management realize the project's potential value and benefits. Proper project planning allows everyone involved in the project to clearly see the multifaceted components of the project in order to gain a better understanding of every other project phase (initiation, execution, monitoring/controlling, and closure); in addition to the mini work activities mentioned earlier, project components also include various kinds of deliverables (e.g., project charter, scope document, and the project plan document) which make everyone, including the project manager, prioritize on such factors as estimated costs; resource allocation; and delegation of necessary roles and responsibilities. Knowing these quantitative and qualitative measures allows the project manager to decide on how to continue the project in response to the circumstances as they arise, leading to improved quality in multiple areas prior to the execution of the project. Altogether, project planning keeps every involved person updated on the project's overall health (in terms of performance), helps the project manager articulate project statuses in more detail, and is done to get approval on fully starting the project.

8) Discuss the six different contracts and under what conditions they are useful for clients and contractors.

Depending on work considerations and the agreed-upon terms between both clients and contractors, the right contractors will eventually join the project after signing one of the six types of contracts. The first type is the [fixed-price contract] in which clients seek for highly qualified contractors to do work based on clients' expectations, including the amount of pay clients are willing to offer the contractors. Clients will post jobs on the government's online portal, on widely known platforms like Indeed, and on publications (e.g., newspapers), where contractors can conveniently search up a list of clients. Contractors would be glad to see a vast number of job opportunities across various sources.

Anyway, a *fixed-price contract* primarily targets candidates who are willing to adapt to clients' desires, and try to understand the project from the clients' perspectives. In addition, contractors need to clearly understand the project's objectives and scope before they sign this type of contract. Contractors will sign this contract if they believe the project is worth doing; they're willing to put in maximum effort to complete the project; and they agree to work at the same pay rate for their entire time spent on the project. Though contractors may deeply suffer if they're not well-adjusted, clients will almost always benefit from a *fixed-price contract* because, even if the project doesn't turn out as expected, clients still pay the contractors the same amount at the end of the project, with little or no changes in expenses.

Perhaps, contractors can slightly benefit from the other type of *fixed-price contract*, the [fixed-price incentive fee contract] because both contractors and clients will share benefits and/or losses (e.g., both will encounter risks, will be held accountable for mitigating such risks, and will endure common struggles in doing so). Still, clients have greater control after this contract is signed since they can choose to provide an alternative reward for contractors' work other than money. This alternative is meant to attract contractors' interest in the project, and help clients sustain profits by reducing cost.

Besides *fixed-price contracts*, there are three variations of *cost-plus* contracts. The first is the [cost-plus fixed fee contract] which guarantees that contractors get paid regardless of any changes in the clients' offers. Though this may appear beneficial to contractors, it's likely that their work performance will suffer because they know they'll still be paid even if the project isn't going well, making contractors less driven to continue the hard work since the start of the project, and think they're simply getting paid for their participation in the project rather than for their work quality. As a result, contractors feel unsatisfied with their invested time and effort and start to lose interest in the project, delaying the project from on-time completion.

Similarly, a [cost-plus percentage fee contract] doesn't guarantee payment to contractors based on their performance, but at least the contractors' work contributions

are valued. Contractors who feel they're being helpful to the project will communicate more openly with clients, establishing trust between both parties. To be clear, these actively engaged contractors are willing to provide accurate updates to clients, who in return, offer contractors qualitative feedback for improvement. This creates a win-win for all, and helps to maintain full cooperation.

Then, there's a [cost-plus incentive fee contract], which is similar to fixed-price incentive fee contract in that clients offer an alternative reward to contractors in order to reduce costs and expect increasing profit. Unlike the fixed-price incentive fee contract, the cost-plus type allows for bonus pays to contractors (if clients actually exceed their desired profit levels). Again, it's important that contractors don't fall into the trap of thinking they really deserve the additional pay, otherwise, they'll be focused more on money than on hard work. Though on a positive note, clients end up saving money by keeping the same contractors to work on the project rather than adding new ones, and by trying to avoid the opportunity cost of replacing the current contractors. As for the contractors, a cost-plus incentive fee contract gives them the privilege to openly negotiate with clients about additional pays.

The last of the six types of contracts is the [guaranteed maximum-shared savings contract], which is similar to the *fixed-price incentive fee contract* in that both contractors and clients will share risks. On the other hand, this type of contract mandates contractors and clients to share the net savings so that neither party takes all the benefits. For the contractors, they're guaranteed a fixed pay that clients are willing to offer from the start of the project (and the actual pay, if determined), but could also be at a disadvantage since the contractors will be responsible for any additional cost. Luckily, this type of contract protects clients from the additional cost, forcing contractors to seek other cost-effective projects (and if the contractors are unable to do so, they'll most likely give up on the current project, and look for others from clients that offer more flexibility).

Grade: 95 / 100

Professor's Feedback:

2. Planning makes us look ahead in the project life cycle so we can prepare our activities which need to be accomplished and head off obstacles at an early stage. Planning provides focus to the project's direction and provides a basis or benchmark with which to measure actual performance. This helps the PM keep the project on track and also provides a sense of comfort to the project team and stakeholders/upper mgmt (which you mentioned).

8. A type which the book left out was a Time and Materials contract, which I believe is the most prevalentcertainly in the IT space. Many of the six types mentioned in the book are applied in the Construction industry.

Only (small) comment is in the Cost-Plus Fee contract wording. Both parties share profits and risks whereas you used the word "benefits".