Project Name:

Author Name:

**The blue text is guidance -- delete it.**

1. As you complete this template, **delete all the blue text. No blue in your Vision!**

2. Add additional sections for other information you want to include (optional).

*3*. Provide important background info in Section 1. Provide annotated references in section 3.

The Vision should *provide* a **big picture** (overall understanding) of *your proposal*.

# Problem Statement

## Background

Summarize the rationale for your proposed product. Provide a description of the situation or history that leads to the recognition that *there is a need/want for this product*.

You should do research into the area and *provide* references, like this [1]*.*

*A poorly written background suggests you have not invested in understanding the domain area and the stakeholders. Such proposals will be rejected permanently (no rewrites considered).*

## Stakeholders and Their Needs

Describe who is affected by the "problem" you describe above and how they *will* benefit from your proposed project. For a commercial product, this includes the market opportunity.

Stakeholders are individuals, groups, or organizations that are involved in the project, affected by its outcome, or can influence *the* outcome. Stakeholders *are* *grouped* by their their relation to the project ("executives"), main interest, or "stake" in the product.

Optional: you can summarize the stakeholder groups in a table such as this *one* for an online vaccination info application.

|  |  |  |
| --- | --- | --- |
| **Stakeholder** | **Major Interests** | **Value** |
| executives | See product as a way to increase revenue. Features that distinguish it from the competitors; time to market; cost to develop | increased revenue |
| *physicians* | *Quick access to accurate vaccination history, regulatory requirements, notification of any health advisories and recommended vaccines for his patient.* | *one-stop access to patient's vaccination history, needs, and health risks* |
| *parents* | *privacy of child's medical data, ability to view data and authorize or deny access to others.* | *ensure child's safety, avoid unnecessary or dangerous vaccines but receive essential ones* |

Examples of stakeholder value include:

* improved productivity (explain how)
* ability to perform entirely new tasks (what tasks?)
* cost savings
* streamlined work process
* automation of manual tasks
* conformance to standards or regulations (name them)
* improved usability or reduced frustration compared to current applications (describe how)

## Users or Customers

*Describe other users of the product. You may want to describe problems that users have with current available solutions.*

## Existing Solutions and **Opportunity**

Describe *existing solutions for the problem. In what way do existing solutions not satisfy the stakeholders and users, or you think your proposed product would add more value?* Identify *any* problem(s) that cannot be satisfied by other solutions.

*Related to that, what is the opportunity you see for your proposed product?*

# Vision of the Solution

This section establishes a vision for your product and the objectives of the project. This vision provides the context for making decisions throughout the course of the development life cycle. The vision should not include details of functional requirements or project planning information.

Clarify the scope and limitations to establish realistic expectations of the stakeholders. It’s important to define what will and what will not be included in the product.

## Vision Statement

*Describe your proposed product. You want everyone to share a common understanding of what you are going to create, and the project's objectives -- that's the purpose of the Vision!*

The vision should be clear, memorable, and unifying. *Mock-ups and other visuals* are helpful. No meaningless "eye candy" *such as* splash screens, logos, login pages, or charts without a clear purpose.

## Major Features

List the major features of *your* product. Emphasiz*e* features that distinguish it from competing products. A **numbered list** can be useful.

Focus on "high level" features. *You don't need to go into great* detail. Details will *be added* later. Larman [3], section 7.7 (page 111-114) *has* advice on what to include but you should include more detail than his brief examples.

Include non-functional requirements if they are important to the value of the product. These include usability, reliability, platform, security, and support.

## **Features that will not be developed**

*If a feature is deliberately left of the product's feature set, it should described here so the stakeholders will know*. If there is a specific reason for excluding something, explain the reason.

Knowing what is "out of scope" also provides a rationale for evaluating proposed changes you get later. If a proposed change *is for* something that is explicitly excluded here, *this section provides a justification for not making the change*.

## Scope of Phased Release (not needed for ISP projects)

A product may be released in phases, where each phase adds new features. This section describes what will be delivered at each phase. For ISP, this level of detail is not needed.

In fact, you will likely have a preliminary release to demo your progress, but you don't need to commit to the functionality here.

## Risks

List potential risks to the project. Risks include both internal and external factors. *B*e realistic: don't include tangential things that are not real risks

*Identifying* risks is essential! *A* plan to mitigat*e risks will be included in the Project Plan (a separate document).*

# References

*References should be specific. Don't write something overly broad like:* https://wikipedia.org ! *Include a short description of what the reference is for.*

[1] Stellman and Greene, *Applied Software Project Management,* O'Reilly 2006.

Chapter 2 "*Software Project Planning"* describes how to start a project, the Vision and Scope document, and the Project Plan. This template mostly uses their format. A summary of Chapter 2 is available online: <https://www.stellman-greene.com/about/applied-software-project-management/applied-software-project-management-software-project-planning-practices/>

[2] Berkun, Scott. The Art of Project Management. O'Reilly, 2005.

Chapter 4 *"Writing the Good Vision"* has good advise on creating and writing a vision (but no template). Highly recommended! It's easy to read. *Online summary:* <https://www.oreilly.com/library/view/making-things-happen/9780596517717/ch04.html>

(the summary is from another Berkun books, but its nearly identical.)

[3] Larman, Craig. *Applying UML and Patterns, 3rd Edition,* Prentice Hall.

*One of the best books on Object-oriented analysis and design. Section 7.7. describes how to write features in a Vision, but for this course please write* ***more******detail*** *than in Larman's example.*

# Revision and Feedback History

**Authors**: record a summary of what you change here. This helps everyone understand what has been done, and informs TAs and Instructor how you have incorporated feedback and suggestions.

**TAs**: Write a summary of your feedback and suggestions, along with your name. This *makes it visible to everyone what advice has been given to students*.

*Write* as much *detail* as you like! Better to write too much than write too little.

|  |  |  |
| --- | --- | --- |
| **Name** | **Date** | **Description** |
| *James* | 8/8/2021 | Create template for ISP projects based on the templates from Process Impact and the OpenUP. |
| *James* | 20/9/2022 | Simplify and clarify template guidance in all sections. |
| *James* | 15/8/2024 | Major changes to template. Removed many sections from old template that are not essential and adopt a format similar what is shown in Stellman & Greene's book. |