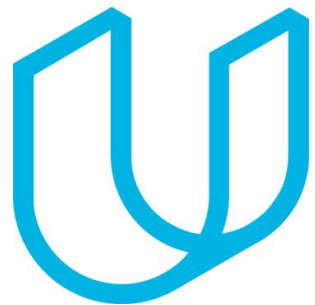


# Foundations of Agile and Agile Frameworks

## **EXERCISE WORKBOOK**



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## Case Study: SocialKare.gov

SocialKare.gov was launched to allow citizens of Nunamerica to enroll in Social Services provided by the government as a result of a devastating pandemic. Unfortunately, the launch of SocialKare.gov was seen as a disaster from all project management metrics, as well as by its key stakeholders' low satisfaction ratings.

*We will be using this scenario for all of the exercises in this course*

### Independent Investigation

An independent post-mortem investigation was launched into this project.

The investigation found a pattern of

- poor practices
- lack of clearly identified technical standards
- poor methods to identify software and coding errors.

This led to poor functionality on the website.

During the post-mortem, for virtually every error or gap, the project team claimed it had insufficient time to complete the website by the imposed deadline.

The project was a fixed fee contract with a clearly defined scope of work that was identified up front. As it eventually turned out, this was a complex website with a lot of unrealistic expectations. The multiple government agencies and stakeholders involved handed over a detailed set of inconsistent and difficult to decipher requirements up front. The expectations set for the project team was that they must deliver this content per the defined requirements and contract terms.

An anonymous survey of the team also indicated low morale, stress and employee fatigue.



## 8 Key Findings from Independent Investigation

1. The website launched across all States on the same day. With zero prior experience for citizens who had never used such a website for their important Social Services needs, there was tremendous confusion during the first few days. The system got overwhelmed with users and a multitude of performance issues were reported immediately.
2. Despite following strict government processes, the project developed the website without effective planning or oversight. The government agencies incurred significant cost increases, schedule mistakes and delayed system functionality because of changing requirements at the tail end of the project for functionality that had to go through a stringent change control review. This resulted in significant delays. More agencies were supposed to have input on the development of the website, but the project team did not have a structured approach to obtaining their input.
3. Major coding errors and insufficient capacity for scaling. An investigation identified excessive serious coding flaws in the structure of the website. The project team did not take enough steps to correct the issue until much later in the project life cycle. Some were resolved after going to production. The website was launched with insufficient visitor capacity, leading to further end user frustration. This was captured in the lessons learned session conducted after going to production. There were no Retrospectives and interim lessons learned sessions while the project was underway.
4. Majority of the eligibility requirements were never approved by SocialKare project sponsors and supporting systems integration testing was patchy. The project team claimed they were trying to develop the system in an expedited fashion to meet the deadline so steps 'had to be missed'. Two months before the scheduled launch, integration tests on the website had not been completed. End-to-end testing, left as the last phase, was never completed before the website launched.
5. Despite thorough documentation and paper trails, oversight was inadequate. Theoretically, a number of governing committees were supposed to oversee the project through quarterly meetings with status updates. The project team spent a significant amount of time keeping up with the required project documents. However, no one raised issues of SocialKare.gov's functionality at the quarterly meetings since neither business representatives nor end user representatives had any hands-on demonstration of functionality that was being built.
6. The project team did not actively engage those business users who best understood the needs of the end users. The project team did not have a formal structure in place to ensure that everyone involved had a shared understanding of all the requirements.

7. While the project team was incentivized to deliver the requirements as specified, due to the time crunch, there was little in the way of ensuring these requirements made business sense throughout the project life cycle. The project team was overwhelmed with an excessive amount of requirements, all flagged as mandatory. What was given as detailed requirements upfront is what the project team worked diligently to deliver. The details were fuzzy in many instances, but the team did not have reliable business representatives readily available to clarify in a timely manner. So, the project team proceeded based on assumptions. It was later realized that several of these requirements were of little value to end users. Further, several key requirements were never uncovered until going to production.
8. Work was assigned by the Project Manager and her boss to the team members as the beginning of the project. Monthly status meetings were conducted by the Project Manager to check on progress based on the defined milestones upfront. Each team member worked on their own list of tasks in silos. The Project Manager monitored everyone's technical progress individually and stepped in to troubleshoot technical problems. The developers started to depend on the Project Manager's technical assistance.

# SocialKare.gov Employees

*This information will be helpful for the Three Core Roles Exercise*

- **John Details:**

John is a detail oriented individual who likes to plan everything out in tremendous detail. He has several years of experience as a Technical Project Manager. Prior to stepping into the role of Project Manager, John was a Developer. He is known to have good communication skills.

- **Sarah Tenure:**

Sarah has been with the Agency responsible for launching SocialKare.gov for over 2 decades. Sarah has a lot of business knowledge and carries a certain amount of credibility due to this tenure. Sarah is strong headed and likes to make decisions based on how she sees things because she believes she has better insight than others who may have been with the organization for as long as she has.

- **Tim Devs:**

Tim has excellent technical skills. He prefers working as an individual contributor where he can spend time diving into the technical challenges on his own. He is well respected for his technical expertise. Tim maintains a strong focus on technical delivery and prefers the business users to stay out of his way while he is working through the development work. Tim leads a team of 5 developers with specialized vertical skills who are also on this project team

- **Jane Dollars:**

Jane has sponsored this project. She is a senior executive and likes to stay involved with the day to day activities of projects that she sponsors.

# Why Agile Exercises



# Agile Mindset Anti-Patterns

**Instructions:** Read the SocialKare.gov case study and identify at least three anti-patterns that prevented the Agile mindset from being present. Explain why each anti-pattern is problematic.

Anti-Pattern	Evidence and Results



# Agile Manifesto

**Instructions:** Review the SocialKare.gov case study and review the Agile Manifesto Paired Core Values and Agile Principles. Of the four Paired Core Values, which stand out as being absent at SocialKare.gov? Which Agile Principles are missing? Identify at least two of each and explain why.

Missing Paired Core Value	Evidence and Results

Missing Agile Principle	Evidence and Results

# Agile vs. Waterfall

**Instructions:** Review the SocialKare.gov case study. Where do you see weaknesses in the Waterfall approach to the SocialKare.gov project being applicable? Identify at least two weaknesses and explain why you see them as weaknesses when compared to the Agile approach for SocialKare.gov.

Weakness	Evidence and Results

# Setting An Agile Mindset

**Instructions:** Review the SocialKare.gov case study. Outline three recommendations to set an Agile Mindset at SocialKare.gov. Consider the Agile Manifesto in your recommendation and avoid the negative pitfalls of Waterfall. Explain why your recommendation will help.

Recommendation	How It Will Help The Team

# Agile Team Exercises



# Three Core Roles

**Instructions:** Review the SocialKare.gov case and focus on the employees. Identify the three Agile Core roles and their responsibilities and assign a SocialKare.gov employee to each role. Explain your assignments.

Role	Responsibilities	Employee	Justification

# High Performing Agile Teams

**Instructions:** Review the SocialKare.gov case and focus on the employees. Choose three team members and identify areas where they are not following Agile best practices. Share suggestions for improvement as coaching opportunities and explain why the coaching is needed.

Role/Team Member	Coaching Opportunity	Justification

# Non-Core Roles

**Instructions:** Review the SocialKare.gov case. Identify at least three non-core roles for the Agile Team. Explain why that role is important to the team’s success.

Non-Core Role	Justification



# Agile Decision Making

**Instructions:** Review the SocialKare.gov case study. identify three types of decisions that should be centralized and three that should be decentralized at SocialKare.gov. Explain your recommendations.

Centralized Decisions	Justification
Decentralized Decisions	Justification

# Agile Framework Exercises



# The Benefits of Using Agile Frameworks

**Instructions:** Review the SocialKare.gov case study. List at least 3 specific benefits of using an Agile Framework and explain how those benefits will help SocialKare.gov achieve its goals.

Benefit from Using an Agile Framework	How The Benefit will Help SocialKare.gov

# Set Up the Scrum Framework

**Instructions:** Review the SocialKare.gov case study. Set up Scrum for the SocialKare.gov team by recommending the core roles to fill and the ceremonies to be conducted. Include the schedule, duration and agenda for each recommended ceremony.

Role	Responsibilities

Scrum Ceremony	Purpose	Agenda	Schedule and Frequency

Scrum Ceremony	Purpose	Agenda	Schedule and Frequency

# Kanban vs. XP

**Instructions:** Review the Kanban and XP Frameworks. Identify key differences between the two frameworks in terms of roles, ceremonies and practices.

## Core Roles in Kanban

Role	Responsibilities

## Core Roles in XP

Role	Responsibilities



# Kanban Ceremonies

Ceremony	Purpose	Agenda	Schedule and Frequency

## XP Ceremonies

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## Key Differences Between Kanban and XP

# Recommend a Framework

**Instructions:** Review the SocialKare.gov case study and the Scrum, Kanban and XP frameworks. Recommend a framework or combinations of frameworks for SocialKare.gov. Justify your recommendation by listing the specific characteristics of the framework that will bring value to SocialKare.gov.

Recommended Framework

Characteristic	Justification