



# **AGILE FOUNDATIONS**

## PART 1: AGILE VS WATERFALL

### **PARTICIPANT GUIDE**

## TABLE OF CONTENTS

OVERVIEW: .....	3
BATTLESHIP ACTIVITY.....	4
WHAT IS WATERFALL?.....	6
WHAT IS AGILE? .....	7
QUICK RECALL .....	8
WHEN TO USE WATERFALL VS AGILE .....	9
PROS AND CONS.....	10
YOUR THOUGHTS.....	11
WHAT COMES NEXT?.....	11
PRE-TRAINING ASSIGNMENT DETAILS.....	12
HYPERLINKS IN THIS DOCUMENT .....	12

# AGILE FOUNDATIONS: AGILE VS WATERFALL

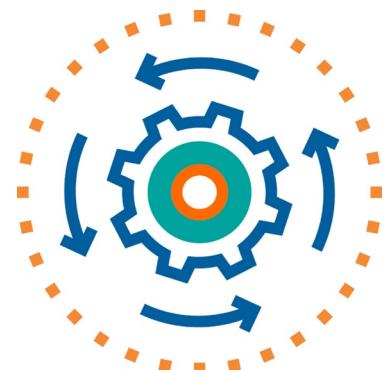
## OVERVIEW:

This course is the first in a series of learning events that will focus on what it means to be agile and why we seek to be agile in IT at UWM. As you enter your new role and new team, it is important to have a common understanding of the agile values, principles, and frameworks to ensure that you are set up for success when talking about these terms with your team. Each team at UWM has the opportunity to decide how they adopt the agile mindset to their project and practices, but having a strong foundation will make it easier for you to understand the why behind some of your team's practices and processes. This series of courses will give you that foundation of what it means to be agile so that you are prepared to have those conversations with your new team.

During this first course, you will learn about the Agile and Waterfall work approaches. Teams in IT at UWM use both approaches and both have their pros and cons. The goal of today is to have a basic understanding of each approach and the ability to recognize the advantages each can bring to different scenarios.

## OUTCOMES:

- Explain how the Agile and Waterfall approaches are different
- Identify characteristics of work environments that are best suited to each approach (agile vs waterfall)



Throughout this document, you will see two icons. Here is what each icon means:



**ACTIVITY** – When you see this icon, it indicates an activity you will participate in during the training. Please wait for directions from your trainer before using these sections of the document



**CONTENT** – When you see this icon, it indicates a section where you should take notes on the content. Any information in these sections could be used in assessments.



## BATTLESHIP ACTIVITY

Use the board below to complete the Battleship learning activity. Please wait for instructions from your facilitator before starting this activity.

	1	2	3	4	5	6
A						
B						
C						
D						
E						

You have 3 boats. Each boat is 3 spaces in length.

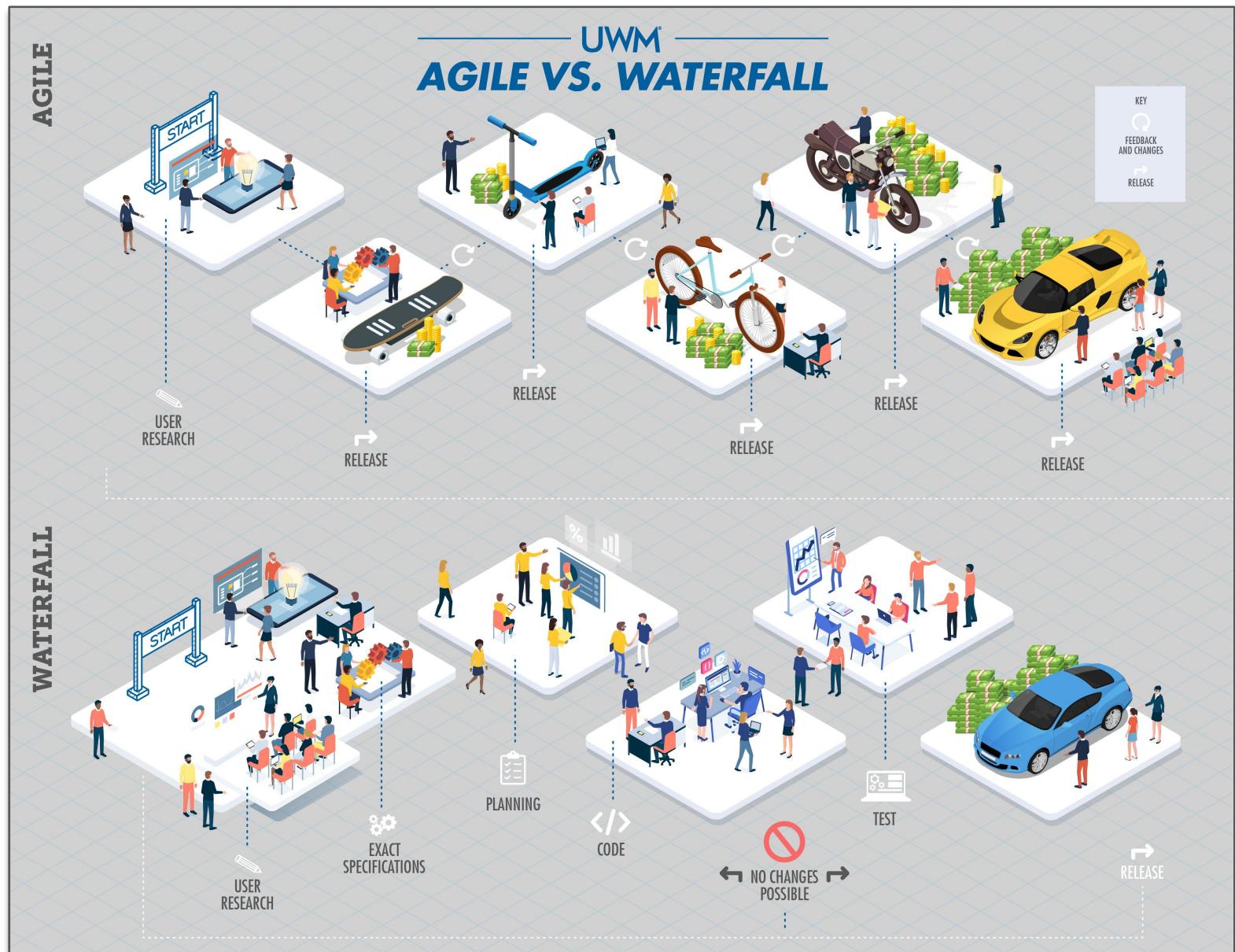
### Boat Placement Rules:

- Boats can only be placed horizontally and vertically. No diagonals.
- Ships must remain in the grid.
- Ships cannot overlap one another.

### ATTACK PLAN

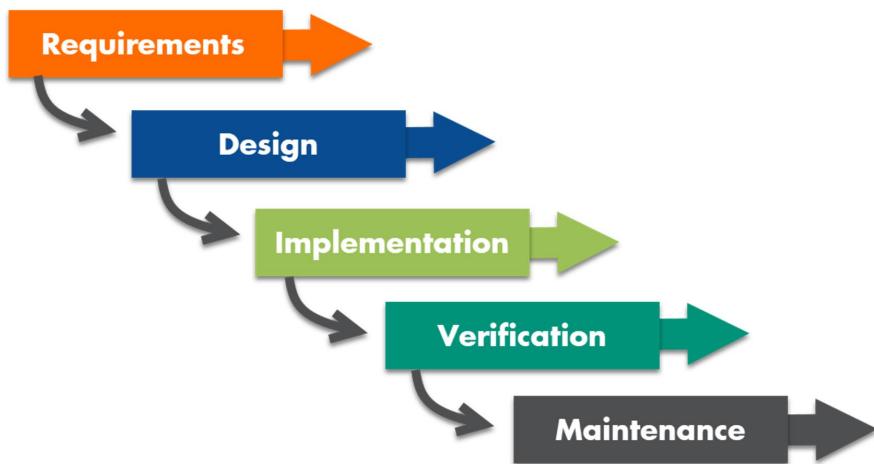
Once you have drawn your boats, use the spaces below to plan your five attacks.

Attack #1	Attack #2	Attack #3	Attack #4	Attack #5



## 1 WHAT IS WATERFALL?

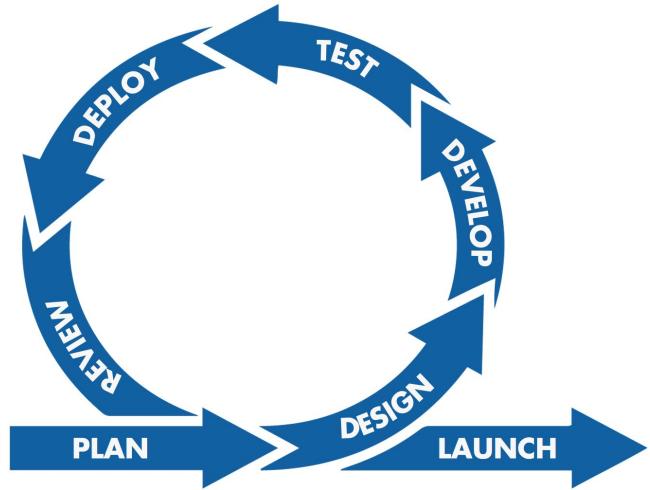
In the box below, write your own definition for the Waterfall approach. Use the image on this page to help you with your explanation.



NOTES

## **i** WHAT IS AGILE?

Use the box below to write your own definition of what the term Agile means. Use the image below to help you with your explanation.



NOTES

 **QUICK RECALL**

Your facilitator will let you know when to complete this activity.

In this box, write five things you can remember about Agile at this point in the training.



## WHEN TO USE AGILE VS WATERFALL

Both the Agile and Waterfall models can be successful. It just depends on the work environment in which they are implemented. Use the image on page 5 to help remind you of the differences between the two approaches.

In the chart below, you can see some of the elements of work environments that are best suited to either model.

AGILE	WATERFALL
<ul style="list-style-type: none"><li>• Client preferences and solutions change frequently</li><li>• Close collaboration and rapid feedback are feasible</li><li>• Problems are complex, solutions are unknown, the scope is unclear</li><li>• Work can be broken down</li></ul>	<ul style="list-style-type: none"><li>• Conditions are stable and predictable</li><li>• Clients are unavailable for constant collaboration</li><li>• Work plans can be forecasted with confidence</li><li>• A completed product is needed</li></ul>

NOTES



## PROS AND CONS

Using what you know so far about the two approaches, create a list in the table below of what you think are some pros and cons of each approach.

WATERFALL	
PROS	CONS

AGILE	
PROS	CONS



## YOUR THOUGHTS

Take a minute and reflect on the two work approaches. Which of these two approaches do you prefer, and why?



## WHAT COMES NEXT?

In order to prepare for the next Agile learning experience, you have been assigned a **Pre-Training Assignment (PTA)**.

One of the “How We Do Its” in training at UWM is that we believe that in order to learn something, you need the opportunity to practice, or do it. To ensure we provide you with the hands-on time you need, we try to reduce the amount of lecture time in our training programs. However, we need to make sure you have knowledge and basic comprehension of the terms and theories before we ask you to apply them. This is the purpose of the pre-training assignment.

By providing you with “homework” before you show up for the training, we are giving you the opportunity to research and understand basic concepts before coming to class where you will apply and/or discuss them. This allows you to formulate your own thoughts and ideas on the subject as well as draft any questions you would like answered for clarification. Provided with ample time to complete the assignment outside of class time, the key point is that you express the answers in your own terms and come prepared to your next training event.

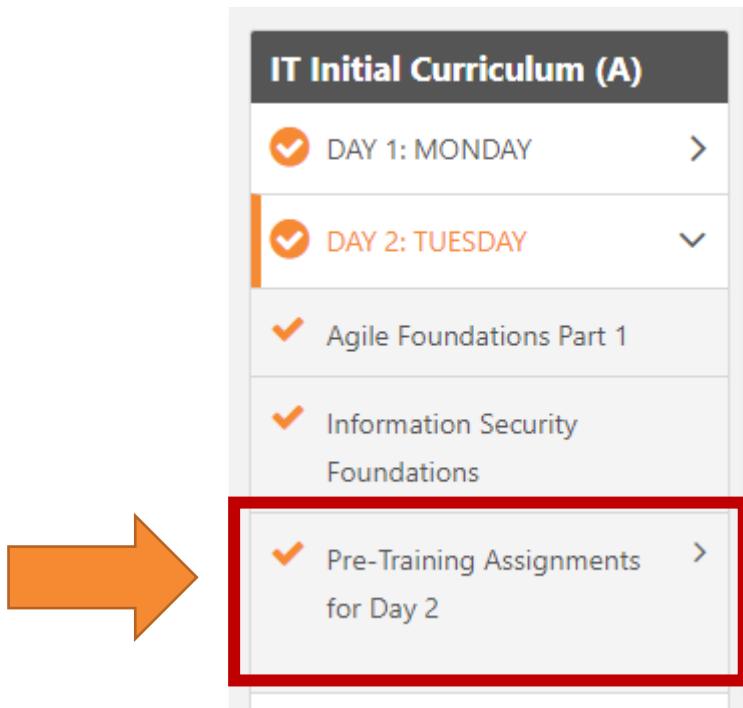
## PRE-TRAINING ASSIGNMENT DETAILS

Before Agile Foundations Part 2: An Agile Values and Principles, you must complete the following assignment(s) online:

- Agile Foundations PTA: Agile Values and Principles Introduction

This assignment can be found in the [Academy](#)<sup>1</sup> in the **IT Initial Curriculum**.

To find this assignment, look under **Day 2: Tuesday** as shown below...



Watch the video and take notes in the **PTA assignment document** (also housed in the IT Initial Curriculum in the Academy).

**Note:**

The PTA document is also the Participant Guide for the Agile Foundations – Part 2 on Wednesday.

## HYPERLINKS IN THIS DOCUMENT

The following links are used in this document:

1. <https://uwm.csod.com/>