Azure DevOps and Continuous Delivery With Git

HELLO!

I am Trevoir Williams

Software Engineer | Lecturer

Course Objectives

Understand Azure DevOps

- Learn How To
  - Setup Azure DevOps Organization
  - Setup Git Repositories
  - Develop Work Items
  - Develop Test Plans
  - Manage Sprints and Tasks

Learn Development Tools

- Learn How To Use:
  - Git
  - Build Pipelines
  - Release Pipelines
  - Tools and Dashboards

Azure DevOps

- Azure DevOps provides developer services for allowing teams to plan work, collaborate on code development, and build and deploy applications.

- Azure DevOps supports a collaborative culture and set of processes that bring together developers, project managers, and contributors to develop software.

Key Features

Use all the DevOps services or choose just what you need to complement your existing workflows

Azure Boards

Azure Pipelines

Azure Repos

Azure Test Plans

Azure Artifacts

Welcome!

Let's get Started

Other Techhnologies

Blazor WebAssembly

- Used to create a simple client app to interface with our Function App

Microsoft Azure

Allow you to host .NET Web Applications.

Visual Studio 2022 and .NET 6

What

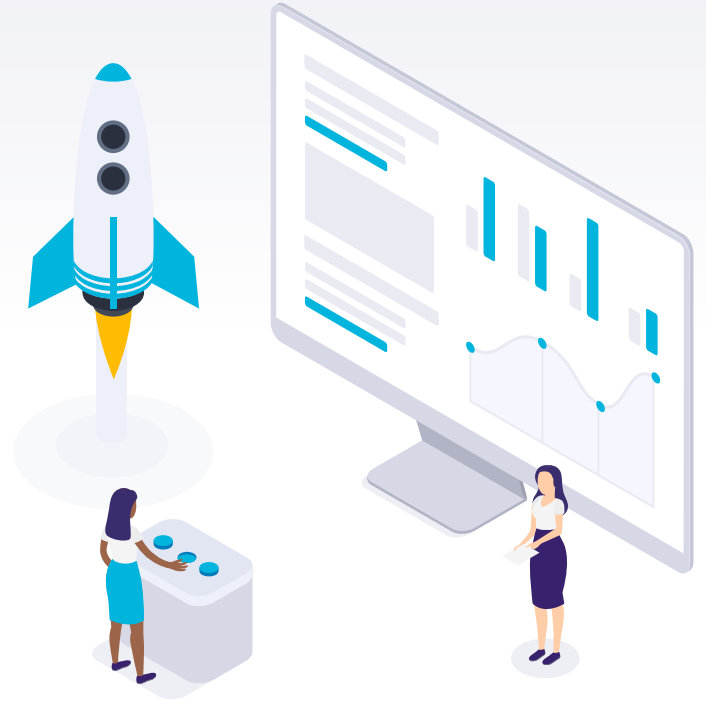A fully-featured, extensible, free IDE for creating modern applications for most devices and platforms.

Why

- Powerful Web Tools to allow development with ASP.NET, jQuery, Bootstrap, among other popular frameworks.

- Git Integration - Manage your source code in Git repos hosted by any provider, including GitHub.

1 Why Learn .NET Core

▶ Microsoft .NET is the platform that drives the business technology of many of the top corporations in the United States and many other countries.

▶ It is the predominant technology used to drive enterprise-scale business technology.

Why Learn .NET Development

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Why Learn .NET Development

- The .NET language of choice to learn is C#, the most widely used language today.

- It is a general purpose programming language that can handle almost any problem, from desktop to mobile to dynamic web applications.

- There is a high demand across the world for .NET developers in a variety of industries.

Publish Your App

- Users need access
- Internal or External
- Options
  - Domain Hosting
  - Internal Server
  - Cloud Hosting (Azure, etc.)
- Continuous Integration and Deployment
  - GitHub Actions
  - Azure DevOps

Get Ready To Rumble!

A picture is worth a thousand words

A complex idea can be conveyed with just a single still image, namely making it possible to absorb large amounts of data quickly.

Want big impact?
Use big image.

Use diagrams to explain your ideas

Vestibulum congue tempus

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor.

Vestibulum congue tempus

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor.

Vestibulum congue tempus

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor. Ipsum dolor sit amet elit, sed do eiusmod tempor.

And tables to compare data

	A	B	C
Yellow	10	20	7
Blue	30	15	10
Orange	5	24	16

Maps

our office

89,526,124

Whoa! That's a big number, aren't you proud?

89,526,124$

That's a lot of money

185,244 users

And a lot of users

100%

Total success!

Our process is easy
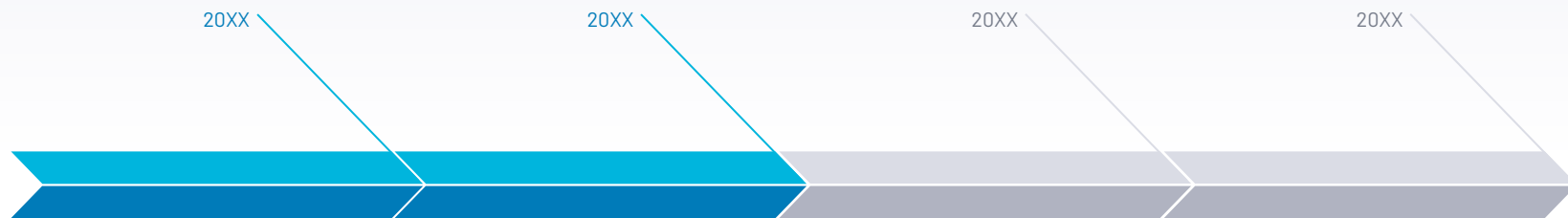
20XX

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Lorem Ipsum

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Let's review some concepts

Yellow

Is the color of gold, butter and ripe lemons. In the spectrum of visible light, yellow is found between green and orange.

Blue

Is the colour of the clear sky and the deep sea. It is located between violet and green on the optical spectrum.

Red

Is the color of blood, and because of this it has historically been associated with sacrifice, danger and courage.

Yellow

Is the color of gold, butter and ripe lemons. In the spectrum of visible light, yellow is found between green and orange.
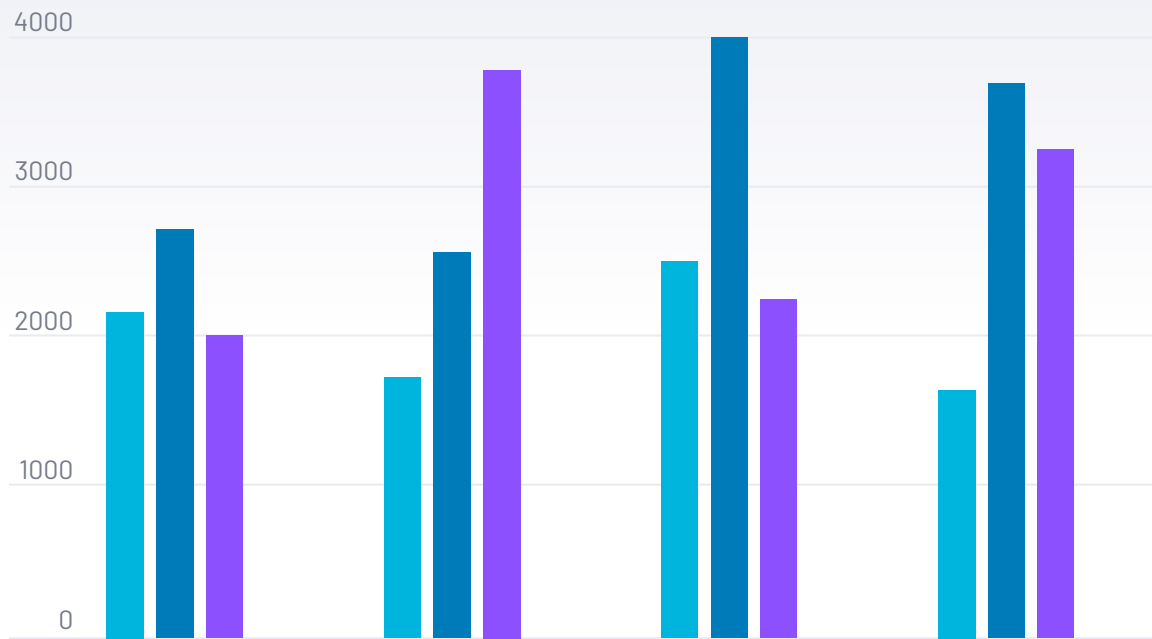
Blue

Is the colour of the clear sky and the deep sea. It is located between violet and green on the optical spectrum.
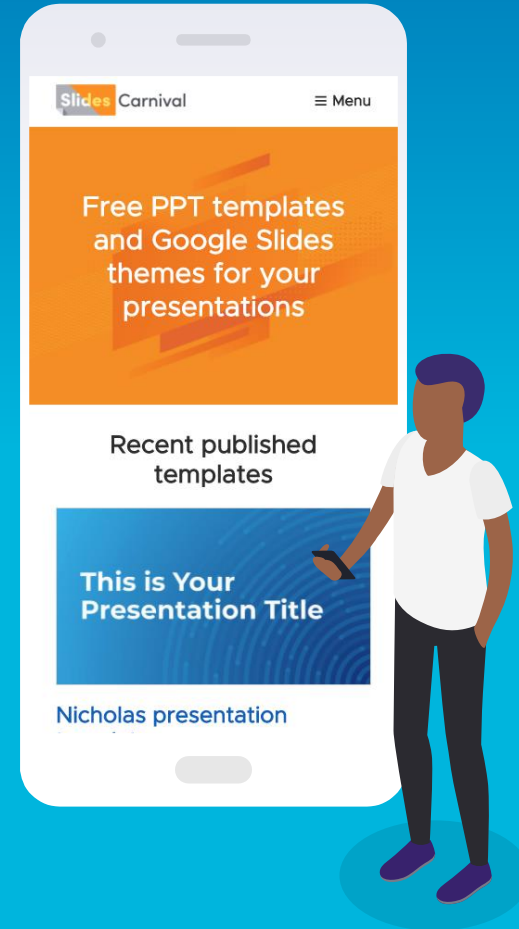
Red

Is the color of blood, and because of this it has historically been associated with sacrifice, danger and courage.

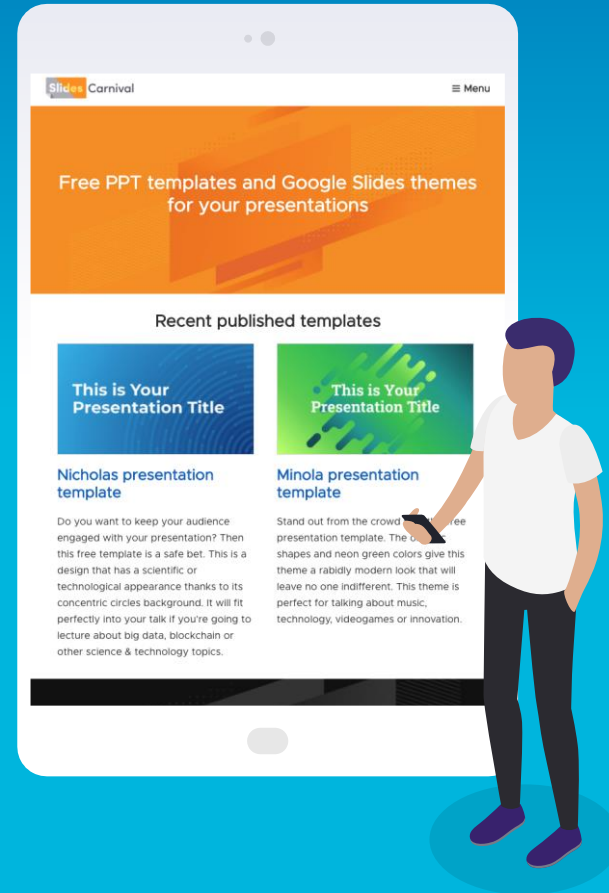You can insert graphs from Excel or Google Sheets

Mobile project

Show and explain your web, app or software projects using these gadget templates.

Tablet project

Show and explain your web, app or software projects using these gadget templates.

Credits

Special thanks to all the people who made and released these awesome resources for free:

- ▸ Presentation template by SlidesCarnival
- ▸ Illustrations by Sergei Tikhonov
- ▸ Photographs by Unsplash

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This presentation uses the following typographies:

- ▶ Titles: Raleway
- ▶ Body copy: Barlow

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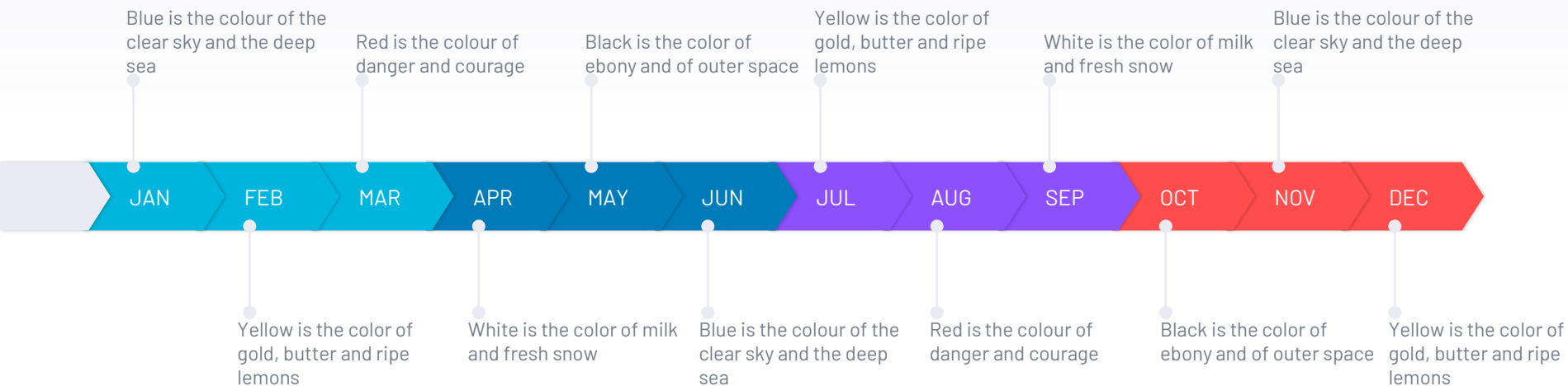
2

Extra Resources

For Business Plans, Marketing Plans, Project Proposals, Lessons, etc

Timeline

Blue is the colour of the clear sky and the deep sea

Red is the colour of danger and courage

Black is the color of ebony and of outer space

Yellow is the color of gold, butter and ripe lemons

White is the color of milk and fresh snow

Blue is the colour of the clear sky and the deep sea

| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |

Yellow is the color of gold, butter and ripe lemons

White is the color of milk and fresh snow

Blue is the colour of the clear sky and the deep sea

Red is the colour of danger and courage

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Yellow is the color of gold, butter and ripe lemons

Waterfall Analysis

STRENGTHS

- Research is done in detail before the project starts

- Timelines and cost estimates are predicted beforehand

WEAKNESSES

Might not be able to plan for every contingency

S **W**

O **T**

OPPORTUNITIES

- Project resources know their exact role during the execution phase

THREATS

Can lead to cost overrun and unbudgeted costs for unforeseen circumstances

Gantt chart

	Week 1						Week 2							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Task 1	■	■												
Task 2		■	■	■	■	◆								
Task 3		■	■	■										
Task 4							■	■	■	■	◆			
Task 5						■	■	■	◆					
Task 6											■	■	■	
Task 7													■	■
Task 8														■
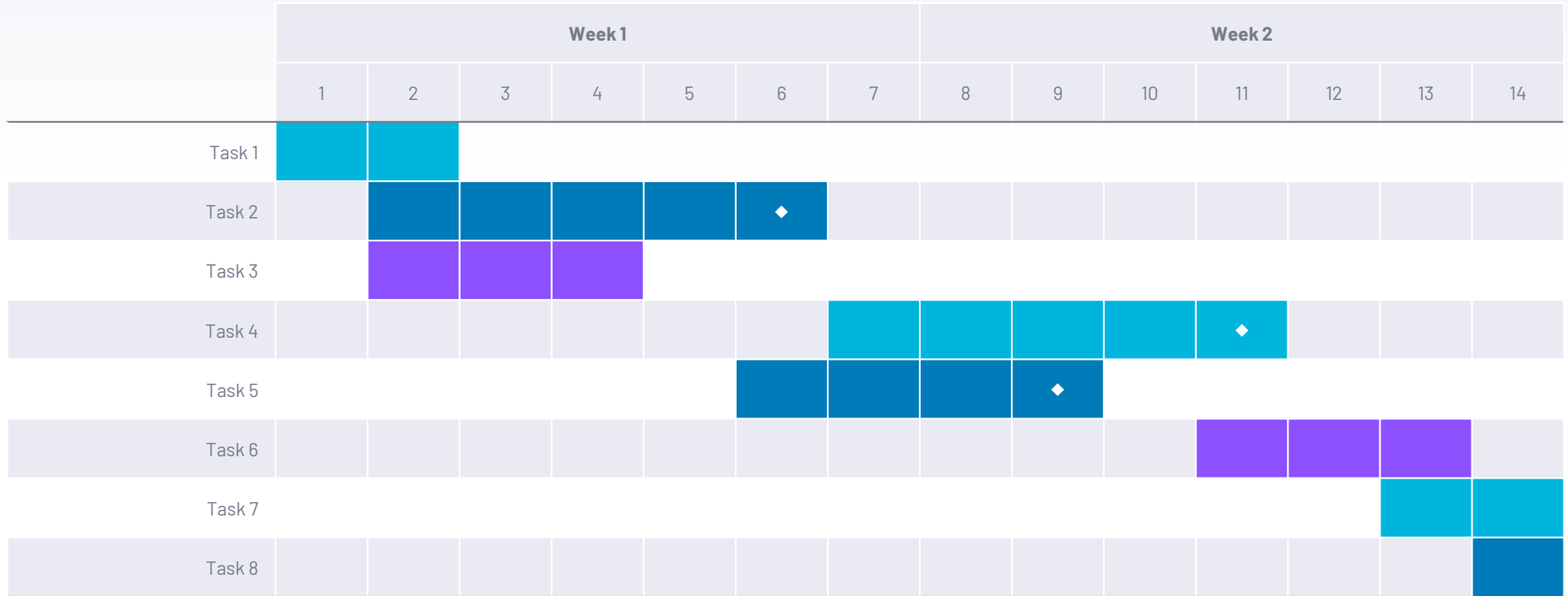
Agile Analysis

STRENGTHS

- Multiple teams working on smaller pieces.

- Quicker release times.

WEAKNESSES

Research and requirements gathering might not be enough to deliver fully

S W O T

OPPORTUNITIES

- Business and development teams side by side.
- Organization can deliver Value more quickly.

THREATS

Can lead to cost overrun through repeated iterations to get bugs fixed.

Roadmap

Blue is the colour of the clear sky and the deep sea

1

Red is the colour of danger and courage

3

Black is the color of ebony and of outer space

5

2

Yellow is the color of gold, butter and ripe lemons

4

White is the color of milk and fresh snow

6

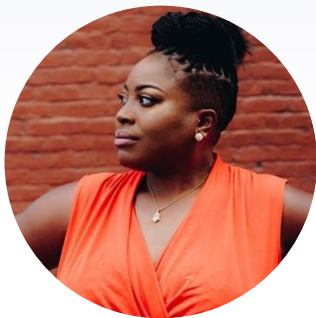Blue is the colour of the clear sky and the deep sea

Business Model Canvas

Key Partners
Insert your content

Key Activities
Insert your content

Key Resources
Insert your content

Value Propositions
Insert your content

Customer Relationships
Insert your content

Channels
Insert your content

Customer Segments
Insert your content

Cost Structure
Insert your content

Revenue Streams
Insert your content

Funnel

AWARENESS ● —————————— ● Insert your content

DISCOVERY ● —————————— ● Insert your content

EVALUATION ● —————————— ● Insert your content

INTENT ● —————————— ● Insert your content

PURCHASE ● —————————— ● Insert your content
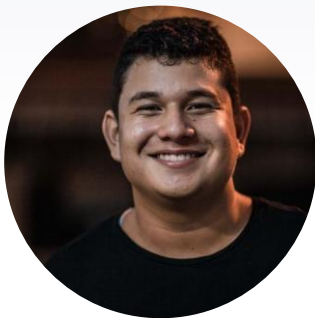
LOYALTY ● —————————— ● Insert your content

Team Presentation

Imani Jackson
JOB TITLE

Blue is the colour of the clear sky and the deep sea

Marcos Galán
JOB TITLE

Blue is the colour of the clear sky and the deep sea

Ixchel Valdía
JOB TITLE

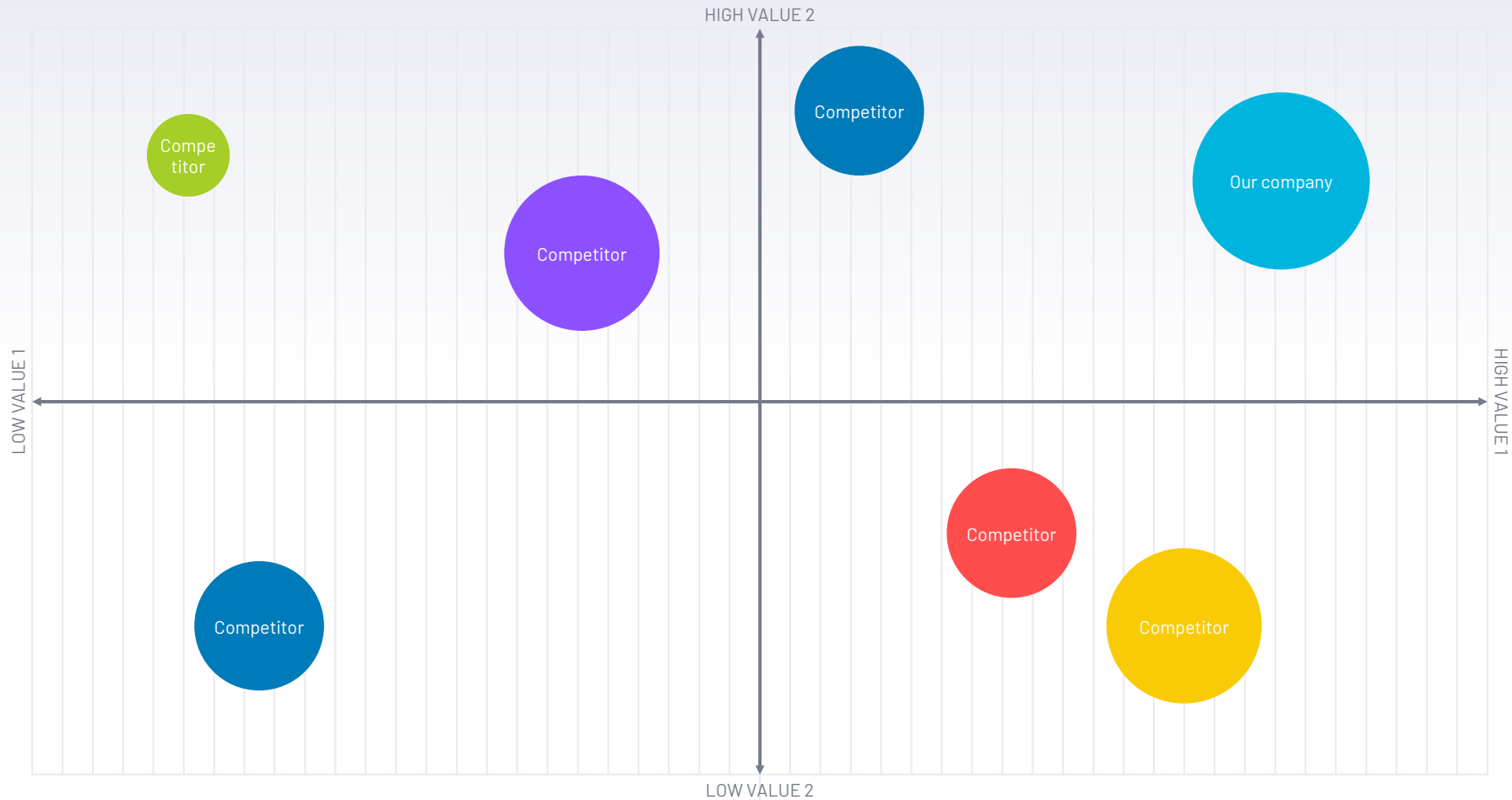Blue is the colour of the clear sky and the deep sea

Nils Årud
JOB TITLE

Blue is the colour of the clear sky and the deep sea

Competitor Matrix

HIGH VALUE 2

Competitor

Competitor

Competitor

Our company

LOW VALUE 1

HIGH VALUE 1

Competitor

Competitor

Competitor

LOW VALUE 2

Weekly Planner

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
09:00 - 09:45	Task	Task	Task	Task	Task	Task	Task
10:00 - 10:45	Task	Task	Task	Task	Task	Task	Task
11:00 - 11:45	Task	Task	Task	Task	Task	Task	Task
12:00 - 13:15	✓Free time	✓Free time	✓Free time	✓Free time	✓Free time	✓Free time	✓Free time
13:30 - 14:15	Task	Task	Task	Task	Task	Task	Task
14:30 - 15:15	Task	Task	Task	Task	Task	Task	Task
15:30 - 16:15	Task	Task	Task	Task	Task	Task	Task

Extra resources
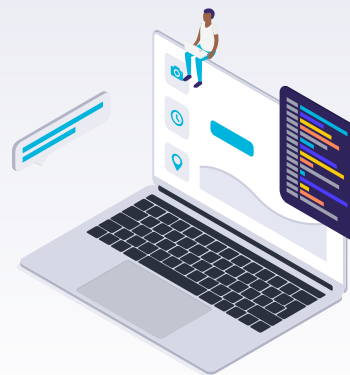
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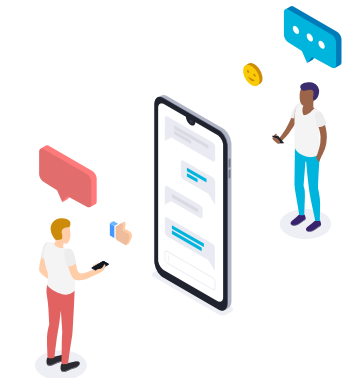
Other Technologies

We will interact with quite a few Azure Services along the journey.

Section Overview

- Discuss Agile vs Waterfall

- Setup Azure DevOps Account

- Discuss Azure Devops main fetures
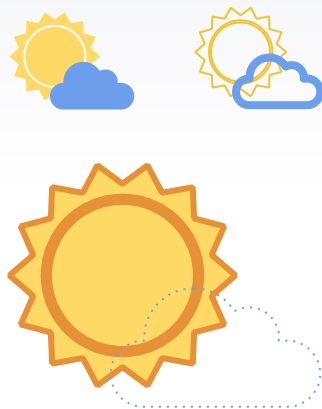
Agile Methodology

Waterfall Methodology

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This means that you can:
▸ Resize them without losing quality.
▸ Change fill color and opacity.
▸ Change line color, width and style.
Isn't that nice? :)

Examples:

Find more icons at slidescarnival.com/extra-free-resources-icons-and-maps

You can also use any emoji as an icon!

And of course it resizes without losing quality.

How? Follow Google instructions https://twitter.com/googledocs/status/730087240156643328

and many more...

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