

# CAB202 Asynchronous Programming with Async Await

A survey on its usage in `c#` and javascript and the paradigms related

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## 1 Introduction

Given no context for the underlying physical system behind a dataset makes allows a analysis for raw data especially for deriving correlations instead of causations. However, if given some context there is sure to be false causality drawn from statements presented in this report. This report will outline some very detailed statistics about the data given and attempt to produce consumable information for potential analysis.

## 2 How async works under the hood in c#

### 2.1 State Machine implementation

### 2.2 SynchronizationContext

```
public HomeViewModel()  
{  
    SelectedIndex = 0;  
    Games = new ObservableCollection<Game>(Db.games);  
    DispatcherTimer timer = new DispatcherTimer();  
}
```

## 3 Previous paradigm used and history of introduction

## 4 Using lazy evaluation of enumerables

## 5 UI based example and how to avoid system locking

## 6 Task.Run based example

## 7 Additional quirks and useful features of Task based await

### 7.1 Cancellation tokens

### 7.2 Progress

## 8 Comparison to javascript

## 9 Javascript similar example using Promise

## References