Assignment 2

CST8333 19F

Professor: Stanley Pieda

By: Lucas Estienne (esti0011)

040 819 959

## Agile Software Methodology

1. **What is Agile Software Development?**  
     
   An article from the Agile Alliance, a nonprofit that supports people who explore and apply Agile values & principles, which provides a short overview of Agile Software Development as well as a history of Agile.

[1]"What is Agile Software Development?", *Agile Alliance*, 2019. [Online]. Available: https://www.agilealliance.org/agile101/. [Accessed: 23- Sep- 2019].

1. **Agile Methodologies**  
     
   An article describing the basics of some of the variations of Agile (i.e. Agile Scrum, Lean, XP, Kanban, FDD)  
     
   [2]"Agile Methodologies", *Blueprintsys.com*, 2019. [Online]. Available: https://www.blueprintsys.com/agile-development-101/agile-methodologies. [Accessed: 23- Sep- 2019].
2. **Agile Model & Methodology: Guide for Developers and Testers**  
     
   A guide which explains the basics of Agile, a comparison to waterfall, as well as an introduction to Scrum and various scum methodologies, as well as other agile methodologies.  
     
   [3]"Agile Model & Methodology: Guide for Developers and Testers", *Guru99.com*, 2019. [Online]. Available: https://www.guru99.com/agile-scrum-extreme-testing.html. [Accessed: 23- Sep- 2019].

## WBS

The WBS below is modified after an example provided by Stanley Pieda (September 2019) Personal Communication.

1. Assignment 3
   1. Research and Learn basic programming concepts
   2. Create record-object for dataset data
   3. Create layers for project
   4. Code Persistence Layer
      1. Code File-IO
         1. Read in data from file
         2. Persist data to file
   5. Code business layer
      1. Create record in memory
      2. Load records from persistence layer
      3. Update record in memory
      4. Delete record in memory
      5. Write records in memory via persistence layer
   6. Code Presentation Layer
      1. View All Records
      2. View Record
      3. Create Record
      4. Update Record
      5. Delete Record
      6. Persist Changes to file
      7. Exit Program
   7. Testing
      1. Test Persistence Layer
      2. Test Business Layer
   8. Documentation
      1. Author name at top of each code file
      2. Documentation comments in each file
      3. MS Word document write-up
   9. Assignment 3 Submission
2. Assignment 4
   1. Research and learn advanced concepts, or a new framework.
   2. Enhancement 1: Multithreading using Goroutines
      1. Research Goroutines
      2. Re-implement features to make use of Goroutines
   3. Enhancement 2: Database
      1. Research Go ORM libraries
      2. Re-implement Create Record using database
      3. Re-implement View Record using database
      4. Re-implement Update Record using database
      5. Re-implement Delete Record using database
   4. Documentation
      1. Author name at top of each code file
      2. Documentation comments in each file
      3. MS Word document write-up
   5. Assignment 4 Submission
3. Final Project
   1. Research and learn concepts needed to implement new project feature
   2. Prepare research bibliography
   3. Work on specified new feature
   4. Test specified new feature
   5. Documentation
      1. Author name at top of each code file
      2. Documentation comments in each file
      3. MS Word document write-up
   6. Final Project Submission