John-Luke Sperght CS 3398,001 Due: 11/03/21 HW

(1) Five software requirement test cases:

DID: GBTC.1

Name: 'A' Range Test case

Objective: To assess the numerical grade and output the students letter grade with in the given constraints.

Input data & procedure: If the numerical grade is >= 90.0, then the student shall recreve an 'A'.

Expected Output: A

(i) ID: GBTC.2

Name: 'B' Range Test Case

Objective: To assess numerical grade input and assess whether the value Ires within the 'B' lange.

Input data & Procedure: If the numerical grade is >= 80.0 and < 90.0, then the student will recreve a 'B.'

Expected output: B

(ii) ID: GBTC. 3

Name: "C' Range Test case

Objective: To assess the numerrial grade input and assess whether the value less in the "C' range.

Input data & Procedure: If the numerical grade is >= 70.0 and < 80.0 the the student will recreve a 'C!

Expected output:

IV ID: GBTC.4

Mame: D'Range Test case

Objective: To assess the numerical grade input and assess whether the value ires in the 'D' range.

Input data & Procedure: If the numerral grade is >=60.0 and < 70 the Student will recreve a 'D' and warning message.

output: 'D' WARNING: You are at list of failing this course.

Contact your professor to rassisstance.

D ID: GBTC.5

Name: 'F' Range Test Case

Objective: To assess the numerical grad input and assess Whether the value Ires in the France.

Input data & procedure: If the numerical grate is \$ 60 the student will recreve an 'F' and warning message:

output: "F' Warning: You are currently failing the's course, contact your professor immeadrately for guidance.

(3) Change Requests

"A request for change occurs before a product has been deployed, ..

· Upon sciencescron and evaluation the technical neutral potential side effects, overall impact on other configuration objects and system function, and the projected cost of change.

. The results are presented in a change report, which is used

by the change control authority.

· After release there may be request made from the customer.

Impact Analysis

- this step involves the development team refining its understanding of the impacts of each change to software by process of analysis.
- · Mrtigation of missing changes prevents future unexpected consequences.

Release Planning

- othis step focuses on the scope of the software, functionality, and performance allocated to the software via herdware.
- · A Framework is created that enables the manager to estimate cost, resources needed, and schedule of development.

@ Fault Repair:

Incremental software development offering sequentral release of Software with more feature in each redease. Customers can

- Delatform Adaptatron:

 Identification of sofware components behavior allows for new approaches to improve software.
- Thus process updates software to correct aning faulty bugs of hardware to enhance performance.

Change Implementation:

- · Release planning and change implementation are directly connected processes.
- · Code refactoring, hardware specifications, software specifications, and project cost all occurduring this stage.

System Release:

- · This stage has the highest priority in software evolution and releases
- the product to the egstomer. . The release manager monstors evality assurance and testing.
- · Any change need iterates the evolutron process Starting at Change
- (3) Distributed client-server systems.
 - Oftesentation concerned with presenting information to the user and managing all user interaction.
 - 2) Data Handling: Managing the data that is passed to and from the client. Implement checks on the data, generate web pages, etc.
- 3 Application Processing: concerned with implementing the logic of the application and thus providing the required functionality to end users.
- (4) Database: Stores data and povides transaction management services, etc.

- 4 Cloud computing
- (and all its dependencies so the application runs quickly and reliably from one computing environment to another. Container images become containers at run-time and isolate software from its environment. This ensures that functionality is uniform despite differences for instance between development and staging.
- Docker: The industry standard for contamerized software development. Docker allows for developers to isolate their app from its environment solving the "it works on my machine" head ache." This service is a standalone, light weight, executable package of software that includes everything needed the run application.
- Software as a Service (Saus): A method for delivering software applications over the internet, run on a distant cloud based computers. Cloud providers host and manage the software application and underlying infastructure. Users connect to the application on a browser on arific, phone for tablet.