SQA - Car Insurance & university

① CAR Insurance

Car Insurance company maintains a contract between user against financial loss. in the event of an accident or theft in car.

SQA: Software Quality Assurance

SQA for a car insurance is composed of a variety of tasks associated with 2 different constituents. software enginnery who builds the car insurance website, and SQA group that has responsibilities for quality assurance planning., oversigut, record keeping analysis and reporting.

The SEI recommends set of SQA activities that assume quality assurance, in car insurance.

Activities :

(i) Prepare SQA plan for a project:

Plan is developed during project planning for car insurance website and is revieved by all parties involved, software developers and others. SQA activities performed by software engg. team and SQA team group are gaverend by the the plan.

→ The plan for car insurance website project looks like the following:

- Evaluation of the current progress of the website needs to performed at regular intervals.

→ Audits and reviews should be performed, inspections of accounts as well as work on the website must occur. Reviews about the work ongoing should take place to keep develops in check and motivated.

→ Standards applicable to the project:

  This includes software engineering process methods, activities and work items are monitored and comply against defined standard by the company.

→ Procedure for error reporting and tracking are made. This can including some individual for testing and reporting bugs to developers. and retesting after assigned period, including repeated tacking.

→ Document that are needed to be made by SOA team are: purpose section, reference section, software

Participates in the development of projects software process description

- Software team selects a process for work to be performed
- SQA reviews process description (creating backend/frontend of car insurance company) for compliance with organisation (car insurance company) policy, internal software standards, externally imposed standards and other parts of software project plan.

Reviews software engineering activities to verify compliances with defined software process

- SQA identifies documents and track deviations from process and verifies that corrections have been made (eg bugs)

Audits designated software work products to verify compliance with those defined as part of software process. SQA reviews selected work products (modules of car insurance website identifies, documents and track deviations; verifies that corrections have been made; and periodically reports the results of its work to car insurance project manager

ensures that deviations in software work and work products are documented and handled according to a documented procedure

records any non compliance and reports to senior management

Thus SQA activities listed above are performed at each stage of car insurance website development. This ensures that quality of software is maintained.

UNIVERSITY

Introduction:

Waterfall model for already designed for university. Software quality assurance acts as an umbrella process that is performed at each state to ensure quality of the university MIS portal.

SQA: Software Quality Assurance

SQA is composed of various tasks associated with 2 different constituencies - software engineer who do technical work and an SQA group that has responsibility for quality assurance planning, oversight, record keeping analysis and reporting. The SEI recommends set of SQA activities that address quality assurance

Activities:

Prepare an SQA plan for the project
→ Plan is developed during project planning of university portal and is reviewed by all interested parties - developers and students. SQA activities performed by software engineering team and SQA team group are governed by plan. The plan is as follows:
  → Evaluations to be performed
  → Audits and reviews to be performed
    Reviews are filter for SE process. They are applied at various points during software development and serve to uncover errors and defects can be removed.

reviews purify SE activities that we have called analysis, coding and design of university website. It points out needed improvements in the product of people and whole team. It also filters modules of university system which don't require improvement. Apart from these reviews also increase quality and uniformity. Inspections are done for defect removal, reviews for progress assessment are conducted and quality reviews are taken.

→ Standards that are applicable to the project are listed, which includes code of conduct, and other standards needed to be maintained for the project.

→ Procedures for error reporting and tracking are followed. Inspections are peer reviews where engineers examine source of system with aim of discovering defects. checklist of common errors should be used to drive the inspection. error checklists can include:

  ▹ data faults: buffer overflow, uninitialised var
  → control faults: infinite loop generated
  → IP/O/p faults: corruption
  → Interface faults: parameters of method wrong
  → storage/management faults: Failing to load all student details
  → Exception management faults: All errors should be taken to account

errors like not viewing fees correctly, being able to login, incorrect result etc. are also

ensures that deviations in software or work sofre and work products are documented and handled according to a documented procedure.

Records any non compliance and reports to senior management.

University system software, at each stage follows this SQA actions and this ensures the quality of the software that is being developed.

Thus both car insurance and university portal's software quality assurance actions and plan are listed above. Following these will ensure good quality in software development.

→ documents to be produced by SQA team

→ amount of feedback provided to software project team - these can be limited by kind of errors or problem in the university website.

Participates in development of project software process description

→ Software team selects a process for work to be performed

→ SQA reviews process description for a process of university system for compliance with organisation policy, internal software standards, externally imposed standards and other parts of software project plan.

→ reviews are done at all stages - coding modules like login, fee section, results etc

Reviews software engineering activities to verify compliances with defined software process. SQA group identifies, documents and track deviations from the process and verifies that corrections have been made

Audits designated software work products to verify compliance with those defined as part of software process: SQA reviews work products (module identifies, documents and track deviations, verifies that correction have been made, and periodically reports result of work to university project manager