## Software Engineering – SE 225 Assignment BSCS<sub>Fall-15</sub> [5<sup>th</sup> semester]



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Grade\Points:

**Question:-** Write a textual use case for the following scenario.

The department of public works for a large city has decided to develop a Web-based pothole tracking and repair system (PHTRS). A description follows:

Citizens can log onto a website and report the location and severity of potholes. As potholes are reported they are logged within a "public works department repair system" and are assigned an identifying number, stored by street address, size (on a scale of 1 to 10), location (middle, curb, etc.), district (determined from street address), and repair priority (determined from the size of the pothole). Work order data are associated with each pothole and include pothole location and size, repair crew identifying number, number of people on crew, equipment assigned, hours applied to repair, hole status (work in progress, repaired, temporary repair, not repaired), amount of filler material used, and cost of repair (computed from hours applied, number of people, material and equipment used). Finally, a damage file is created to hold information about reported damage due to the pothole and includes citizen's name, address, phone number, type of damage, and dollar amount of damage. PHTRS is an online system; all queries are to be made interactively.

## Answer:-

Use Case: PotholeReporting

Primary Actor: User

Goal in Context: report pothole and any associated damage

Precondition: User is already logged in

Trigger: User confronts a pothole and decides to report it

## Scenario:

- 1. User: clicks 'Report Pothole'
- 2. The application displays the following information on a form: Location in street, Severity, Address of Pothole
- 3. User: fills up information about himself/herself into the fields of Report that is to be generated
- 4. Application then prompts user to enter details of type of damage done and approximate damage cost (in local currency value)
- 5. User: fills out the information
- 6. User: pushes submit
- 7. Application stores information that User entered, along with User's information, such as name, address, and phone number
- 8. Information is logged on the website and a damageInfoFile is generated for it.

## Risks

- Users could log a lot of inadequate information, that would lead to an investigation (costing a considerate amount)
- If the system goes down, records could be lost and the crews won't be able to access the info
- Users might exaggerate damage
- End-Users don't use system
- Too many Users use system
- Funding could be lost
- Deadline will be tightened
- Customer will change requirements