

MFE634 Quality Engineering Past Project Topics

1. **An Epidemic Prevention operation** (*Ebola infection prevention/control*): we are interested in ways of improving this disease to spread outside its initial area
2. **An Industrial Rescue** (*manufacturing jobs re-shoring efforts*): problems have risen from taking these jobs away; find ways to solve them via repatriating them.
3. **An International Relief effort** (*Ebola eradication & international aid*): ways of improving eradication efforts of Ebola in the areas where they have grown.
4. **A Health Insurance organization** (*Obama-Care & internet deployment*): the big problems occurred in the deployment of the Web Page for obtaining the Health Insurance this law provides (not the merits/demerits of this law)
5. **A Health Care organization** (*Veterans Administration hospital system*): the serious administrative problems occurred in VA, that led to the Resignation of the Secretary of the VA (who was a minister in the Obama cabinet) & ways to improve.
6. **A Judicial Organization** (*US prison/incarceration systems*): problems associated with large prison population (cost, human, social, etc.) & ways to improve on them.
7. **A Charitable/Service Organization** (*Habitat for Humanity*): problems occurred, and ways to improve on the deliverance of their services, especially abroad.
8. **A Government Organization** (*USAid: Agency for Int'l Development*): problems of providing foreign economic aid, and ways to resolve, or improve on them.
9. **An International Relief effort** (*Refugee migration into Europe*): solve problems in the resettlement of war refugees in European countries where they have arrived.
10. **Health & Social organization** (*Syrian war refugee resettlement camps*): solve problems in the organization of refugee camps (health, education, law & order, etc.)
- 11 **Epidemic Prevention operation** (*ZITA infection eradication/control*): groups are interested in ways of preventing this disease to spread outside its original area
12. **Industrial Rescue** (Specific industrial re-shoring efforts): solve problems arisen from re-shoring these jobs from abroad; define issues from repatriating them again
13. **Demographic Crisis Management** (illegal immigration to US & repatriation): explore problems in sending them back, processing them here and t repercussions.
14. **Industrial Production Disaster** (Flint MI drinking water system management): health problems derived from the discovery of water problems.
15. **Health Care organization** (Medicare extension): managerial & other problems in extending the current Medicare system to a general customer population.
16. **Weather Disaster Management** (Baton Rouge, LA & Sandy Storm): problems with providing aid to disaster zones & their cost in human, social, and other issues.
17. **An Anti-Terrorism Prevention Operation** (Airport access safety and control): passenger, crews, support personnel, baggage etc. inspection to prevent terrorism.
18. **Electric Net Loss Mitigation** (All of Puerto Rico's generators down Sept. 2016) consequences include failures in water supply, air conditioning, traffic control, etc.

19. **An Industrial Organization** (*Volkswagen emissions*): the recent discovery of unauthorized devices to hide vehicle emissions and ways to resolve this situation.
20. **A Mining Disaster Rescue** (*Chilean miners trapped underground*): organization and optimization of efficient rescue efforts to get the entombed miners safely out
21. **A Weather Disaster Management** (Houston Hurricane and Flood Mitigation).
22. **A Weather Disaster Management** (Florida Keys Hurricane Mitigation).
23. **Railway system (Amtrak): improvement and terrorism prevention.**
24. **Seaport operations: improvement and terrorism prevention**
25. **River & Canal operations: improvement and terrorism prevention.**
26. **Subway system operations: improvement and terrorism prevention.**
27. **A Weather Disaster Management** (mudslides Prevention and Mitigation, CA).
28. **A Weather Disaster Management** (river Flood Prevention and Mitigation, SC).
29. **A Weather Disaster Management** (bush fires Prevention and Mitigation, CA)
30. **A Weather Disaster Management** (storm surge Prevention and Mitigation)
31. **Railway system operations: improvement and terrorism prevention.**
32. **International Mall operations: improvement and terrorism prevention.**
33. **Inter-State highway operations: improvement and terrorism prevention.**
34. **Inter-State Bus system operations: improvement and terrorism prevention.**
35. **A Weather Disaster Management** (storm floods Prevention and Mitigation)
36. **A Weather Disaster Management** (volcano eruption Mitigation, Hawaii).
37. **A Weather Disaster Management** (drought Prevention and Mitigation,).
38. **A Weather Disaster Management** (snow storm Prevention and Mitigation)
39. **A State-wide Covid-19 Lock Down; Quality Engineering Analysis**
40. **A State-wide Covid-19 Open-up; Quality Engineering Analysis**
41. **Covid-19 Vaccine distribution; Quality Engineering Analysis**
42. **Covid-19 School Re-opening; Quality Engineering Analysis**
43. **Climate Change and consequences; Quality Engineering Analysis**
44. **World-wide supply chain issues; Quality Engineering Analysis**
45. **Fuel shortages and distribution; Quality Engineering Analysis**
46. **World-wide vaccination issues; Quality Engineering Analysis**
47. **Ukraine Grain Export supply chain; Quality Engineering Analysis**
48. **Ukraine War Refugee Resettling; Quality Engineering Analysis**
49. **Climate Change Prevention** (controlling its causes)
50. **Climate Change Mitigation** (improving its measures)
51. **Providing civilians with Food and Water** in War Zones
52. **Providing civilians with Medical Attention** in War Zones
53. **Providing civilians with Safe Shelter** in War Zones
54. **Mitigating Systemic Rainy Season Floodings**, in Tropical Savannahs
55. **Mitigating Systemic Dry Season Droughts**, in Tropical Savannahs

Updated: I/25.

