OBJECT DETECTION USING MACHINE LEARNING

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CST-451 Capstone Project Test Cases and Traceability

Grand Canyon University

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Revision:

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**Traceability matrix**

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| **ID** | **Feature** | **Requirement ID** | **Code Modules** | **Test Case ID** |
| 1 | Register | FR-1  FR-2  FR-3  FR-4 | App.py  DAO.py | TC-1  TC-2  TC-3  TC-4 |
| 2 | Login | FR-5  FR-6  FR-7 | App.py  DAO.py | TC-5  TC-6  TC-7 |
| 3 | Detect Image | FR-8  FR-9  FR-10  FR-11  FR-12  FR-13  FR-14  FR-15  FR-16 | App.py  DAO.py  Object\_detection\_api\_example.py | TC-8  TC-9  TC-10  TC-11  TC-12  TC-13  TC-14  TC-15  TC-16 |
| 4 | Search Object | FR-17  FR-18 | App.py  DAO.py | TC-17  TC-18 |
| 5 | View a specific object in the image | FR-19 | App.py | TC-19 |
| 6 | Video Detection | FR-20 | App.py  DAO.py | TC-20 |
| 7 | Search object in the Video | FR-21 | App.py  DAO.py | TC-21 |
| 8 | Search Video capture | FR-22 | App.py  DAO.py | TC-22 |
| 9 | Classify Images | FR-23 | App.py | TC-23 |
| 9 | Accessibility | NFR-1 | Apps is not deployed on cloud | TC-24 |
| 10 | Availability | NFR-2 | Apps is not deployed on cloud | TC-25 |
| 11 | Capacity | NFR-3 | Apps is not deployed on cloud | TC-26 |
| 12 | Reliability | NFR-4 | Display Detected result correct | TC-27 |
| 13 | Recoverability | NFR-5 | Save images’ data into database | TC-28 |
| 14 | Security | NFR-6 | App.py  DAO.py | TC-29 |
| 15 | Documentation | NFR-7 | All documents are submitted | TC-30 |