**Functionality Checklist**

CO2402 2023 Assignment Checklist for < Adam James Anthony Hall >

Please fill in the grid to indicate which features you have attempted, and (where appropriate) which code file we should look in to see the implementation of that feature. This will help us mark your work more efficiently and avoid the possibility of us missing something in your code.

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| --- | --- | --- |
| **Feature** | **Attempted** | **Code file(s) (if appropriate)** |
| **Any Grade > 0%** | | |
| Can demo code compiling and running in the lab | YES |  |
| Copy of console output | YES |  |
| **Bare Pass 40% =** | | |
| Complete adherence to style guide | YES |  |
| Code commented throughout | YES |  |
| CCard class (in separate .h / .cpp file!) | YES | CCard.cpp  CCard.h |
| SProfessor structure (or class) | YES | CPlayers.h  CPlayers.cpp |
| Correct card types read from file (for grade required) | YES | CCard.h  CCourseAccreditation.cpp  CEasyTarget.cpp  CFeedbackForum.cpp  CGraduateStudent.cpp  CIndustrialPlacement.cpp  CManager.cpp  CMitigatingCircumstances.cpp  CPassLeader.cpp  CPlagiarismHearing.cpp  CResearchFunding.cpp  CSerialOffender.cpp  CStudent.cpp |
| Console outputs for card names drawn and played, in the correct order / sequencing (for grade required) | YES |  |
| Students attack enemy and reduce their prestige | YES | CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  CTable.cpp  CTable.h  UCANT.CPP |
| Final prestige and winner output to console | YES | CPlayers.h  CPlayers.cpp  CManager.h  CManager.cpp  UCANT.cpp |
| **Third 40% +** | | |
| Collections of pointers to CCard for decks and hands | YES | UCANT.cpp  CManager.h  CManager.cpp |
| CStudent class derived from CCard | YES | CStudent.h  CCard.h |
| Implemented rule for sacking professor | YES | CPlayers.h  CPlayers.cpp |
| All card types read/played (but only students attack) | YES | CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  CTable.cpp  CTable.h  UCANT.CPP |
| **Lower Second 50% +** | | |
| Table implemented, with output each turn | YES | CManager.cpp  CManager.h |
| Implemented rules for cards from table attacking | YES | CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  CTable.cpp  CTable.h  UCANT.CPP |
| CPlagiarismHearing class (derived from CCard) | YES | CPlagiarismHearing.cpp  CPlagiarismHearing.h |
| CCourseAccreditation class (derived from CCard) | YES | CCourseAccreditation.cpp  CCourseAccreditation.h |
| Card pointers all base class pointers, not derived ptrs | YES | UCANT.CPP |
| Over-ridden function for activating a card in each of the derived classes | YES | CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  CTable.cpp  CTable.h  UCANT.CPP |
| Attack behaviour as expected from derived classes | YES | CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  UCANT.CPP |
| **Upper Second 60% +** | | |
| Class diagram (consistent with implementation) | YES |  |
| CPlayer class (not SPlayer struct) | YES | CPlayer.h |
| CFeedbackForum class (derived from CCard) | YES | CFeedbackForum.cpp  CFeedBackForum.h |
| CIndustrialPlacement Class (derived from CCard) | YES | CIndustrialPlacement.cpp  CIndustrialPlacement.h |
| No global variables | YES |  |
| No Memory Leaks (screenshot evidence required) | YES |  |
| Genuine polymorphism  (no asking what type of card it is) | YES | CManager.cpp  CManager.h  CCard.cpp  CCard.h  CCounter.h  CCounter.cpp  CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  CTable.cpp  CTable.h  UCANT.CPP |
| **First 70% +** | | |
| CPassLeader class | YES | CPassLeader.h  CPassLeader.cpp |
| Use of typedef (or using) for vectors | YES | UCANT.CPP |
| Fully OO solution including Game class | YES | CManager.cpp  CManager.h  CCard.cpp  CCard.h  CCounter.h  CCounter.cpp  CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  CTable.cpp  CTable.h  UCANT.CPP |
| Smart pointers instead of new/delete | YES | CManager.cpp  CManager.h  CCard.cpp  CCard.h  CCounter.h  CCounter.cpp  CCourseAccredtiation.cpp  CCourseAccreditation.h  CeasyTarget.cpp  CEasyTarget.h  CFeedbackForum.cpp  CFeedbakForum.h  CGraduateStudent.cpp  CGraduateStudent.h  CIndustrialPlacement.cpp  CIndustrialPlacement.h  CPassLeader.cpp  CPassLeader.h  CPlagiarismHearing.cpp  CPlagiarsimHearing.h  CPlayers.cpp  CPlayers.h  CResearhFunding.cpp  CResearchFunding.h  CSerialOffender.cpp  CSerialOffender.h  CStudent.cpp  CStudent.h  CTable.cpp  CTable.h  UCANT.CPP |
| Additional players | YES | CPlayers.cpp  CPlayers.h  CManager.cpp  UCANT.cpp |
| **High First 85% +** | | |
| Classes for management cards (types 7 and 8) | YES | CResearchFunding.cpp  CResearchFunding.h  CMitigatingCircumstances.cpp  CMitigatingCircumstances.h |
| Classes for student cards (types 9, 10 and 11) | YES | CEasyTarget.h  CEasyTarget.cpp  CSerialOffender.h  CSerialOffender.cpp  CGraduateStudent.h  CGraduateStudent.cpp  UCANT.cpp |

**UML Class Diagram**

A picture containing graphical user interface

Description automatically generated

Direct Download Link to UML Class Diagram Here:



Direct image of UML Class Diagram Here:

