# Comp 4603

# Advanced C++

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| Assignment | 7 | Part | 2 |

Student Name: Alisher Shamayev

BCIT ID: A01182685

To implement **three** structural design patterns using C++

Hint: It’s your choice on which three patterns

Submission:

1. Complete this document with pattern names with UML
2. C++ code/files
3. To submit one zip file including all your files

Late submissions will NOT be accepted.

1st design pattern name:

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| --- |
| Proxy |

Description of your example:

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| In this method we took Server scenario so basicalyy we have a server class and it has two sub classes real server that operates and a proxy server if some requests short easy enough proxy will take care of it, otherwise it will go to real server |

UML diagram

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| Text, letter  Description automatically generated |

2nd design pattern name:

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| Adapter |

Description of your example:

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| In this situation we making two classes as football and basketball however what If we wanted to switch from football to basketball so we made adapter for each that transfers one to another. |

UML diagram

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|  |

3rd design pattern name:

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| Facade |

Description of your example:

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| Here we made a Cinema case so there is two base classes Lights and Screen that both needed to in cinema and there is Cinema Façade class that take both in and uses them when to turn on/off lights and screen. |

UML diagram

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