Bucks Centre for the Performing Arts (BCPA): Online Ticketing System (OTS)

# Classes and Data/Functions Mock-up

These have been generated using the “Case Study Notes” section, and this is just a mock-up prior to any diagram creation. For final classes, hierarchies, methods, data, functions, and concepts, please consult the final UML diagram.

## Class Names

### Non-Person Classes:

Show, Seating Layout, Seat, Promotion, Ticket

### Person Classes:

Person, Venue Manager, Agent, Customer

## Class Structures (Left-most class is parent class)

### Non-Person Classes:

Show 🡪 Seating Layout 🡪 Seat 🡪 Promotion 🡪 Ticket

### Person Classes:

Person 🡪 Venue Manager 🡪 Agent 🡪 Customer

## Class Data & Methods Draft

### Non-Person Classes:

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| **Show** | |
| ***Data*** | ***ShowID, ShowDateTime, ShowName, ShowLengthMins, SeatLayoutLocation, ShowDiscount, ShowBasePrices, ShowSaveLocation, ShowState*** |
| ***Methods*** | **setShowName(), setShowDateTime(), setShowLength(), setShowBasePrices(), setShowDiscount(), setShowSaveLocation(), setSeatingLayoutLocation(), setShowState(), getShowName(), getShowDateTime(), getShowLength(), getShowBasePrices(), getShowDiscount(), getShowSaveLocation(), getSeatingLayoutLocation(), getShowState(), loadSeatingLayout(), loadShow(), initialise()** |

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| **Seating Layout** | |
| ***Data*** | ***MaxSeatsPerCustomer, SeatLayoutImageLocation, SeatLayoutImageSizePx, SeatImagePositionsPx, SeatDataLocation*** |
| ***Methods*** | ***setMaxSeatsPerCustomer*()*, setSeatLayoutImageLocation*()*, getImageSize*()*, setSeatLayoutImageSizePx*()*, setSeatImagePositionsPx*()*, setSeatDataSetLocation*()*, getMaxSeatsPerCustomer(), getSeatLayoutImageLocation(), getImageSize(), getSeatLayoutImageSizePx(), getSeatImagePositionsPx(), getSeatDatagetLocation(), loadSeatDataSet*()*, saveSeatingLayout*()*, loadExistingLayout*()*,* initialise()** |

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| **Seat** | |
| ***Data*** | ***SeatPrice, SeatTimer, SeatImagePositionID, SeatPromotionSaveLocation, SeatStatus, ControllingAgent*** |
| ***Methods*** | **setSeatPrice(), setSeatTimer(), setSeatImagePositionID(), setSeatPromotionSaveLocation(), loadPromotion(), setSeatControllingAgent(), setSeatStatus(), getSeatPrice(), getSeatTimer(), getSeatImagePositionID(), getSeatPromotionSaveLocation(), getSeatControllingAgent(), getSeatStatus(), playTimerAlarm(), saveSeat(), loadExistingSeat(), initialise()** |

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| **Promotion** | |
| ***Data*** | ***promotionName, promotionType, promoPriceReductionPercentages, fixedPromotionalTicketPrices*** |
| ***Methods*** | **setPromoName(), setPromoType(), setPriceReductionPercentages(), setPromoPriceReductionPercentages(), getPromoName(), getPromoType(), getPriceReductionPercentages(), getPromoPriceReductionPercentages(), savePromotion(), loadExistingPromotion(), initialise()** |

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| **Ticket** | |
| ***Data*** | ***TicketID, TicketOwner, TicketText, TicketState*** |
| ***Methods*** | ***setTicketOwner*()*, setTicketText*()*, setTicketState*()*, getTicketOwner(), getTicketText(), getTicketState(), saveTicketImage*()*, createTicketImage*()*, initialise*()** |

### Person Classes:

Person, Venue Manager, Agent, Customer

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| **Person** | |
| ***Data*** | ***Title, FirstName, MiddleName, LastName, DOB, Gender, PhoneNumber, EmailAddress, AddressL1, AddressL2, AddressTown, AddressPostCode, AddressCounty, AddressCountry, Password, UserLevel*** |
| ***Methods*** | ***setTitle(), setFirstName(), setMiddleName(), setLastName(), setDOB(), setGender(), setPhoneNumber(), setEmailAddress(), setAddressL1(), setAddressL2(), setAddressTown(), setAddressPostCode(), setAddressCounty(), setAddressCountry(), setPassword(), SetUserLevel(), getTitle(), getFirstName(), getMiddleName(), getLastName(), getDOB(), getGender(), getPhoneNumber(), getEmailAddress(), getAddressL1(), getAddressL2(), getAddressTown(), getAddressPostCode(), getAddressCounty(), getAddressCountry(), getPassword(), getUserLevel()*** |

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| **Venue Manager** | |
| ***Data*** |  |
| ***Methods*** |  |

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| **Agent** | |
| ***Data*** |  |
| ***Methods*** |  |

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| **Customer** | |
| ***Data*** | ***CardNo, CVC2, ExpiryDate, CardName, CardBillingAddress, DefaultPaymentMethod*** |
| ***Methods*** | ***setCardNo(), setCVC2(), setExpiryDate(), setCardName(), setCardBillingAddress(), setDefaultPaymentMethod(), getCardNo(), getCVC2(), getExpiryDate(), getCardName(), getCardBillingAddress(), getDefaultPaymentMethod()*** |