**Class-Responsibility-Collaboration Cards**

Only collaborators within our scope are listed. Other subsystems or external providers are not included

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| --- | --- |
| User Account | |
| *Superclass:* | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains user profile information |  |
| Maintains stored PaymentType information | PaymentType |
| Maintains user preferences |  |
| Maintains a collection of past and current bookings | Booking |
| Can register itself |  |
| Can logon |  |
| Can search for Products | Product |

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| --- | --- |
| Product (abstract) | |
| *Superclass:* | |
| *Subclasses:*  PackageHoliday, Accommodation, Travel | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information common to all Product subclasses | Travel  PackageHoliday  Accommodation |
| Has a price |  |
| Has a product reference |  |
| Has a review score |  |

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| Travel (abstract) | |
| *Superclass:* Product | |
| *Subclass:* Flight, Rail, Ferry | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information common to all Travel objects | Flight  Rail  Ferry |
| Has a start date and time |  |
| Has a start and end location | Location |

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| Flight | |
| *Superclass:* Travel | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information regarding flight details |  |
| Is bookable |  |
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| Rail | |
| *Superclass:* Travel | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information regarding rail journey |  |
| Is bookable |  |

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| Ferry | |
| *Superclass:* Travel | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information regarding ferry crossing |  |
| Is bookable |  |

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| Accommodation | |
| *Superclass:* Product | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information about an Accommodation object |  |
| Has an accommodation type |  |
| Has a location | Location |
| Has a star rating |  |
| Has a start and end date |  |
| Is bookable |  |
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| Package Holiday | |
| *Superclass:* Product | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information about a PackageHoliday |  |
| Has a description |  |
| Has a start and end date |  |
| Has a start location | Location |
| Has a destination |  |
| Is bookable |  |

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| Booking | |
| *Superclass:* | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Has one or more Products | Product |
| Is payable | Payment |
| Is viewable |  |
| Is cancellable |  |

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| Payment | |
| *Superclass:* | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains details of Payment Information | PaymentType |
| Has a value |  |
| Has one or more PaymentTypes |  |
| May have a PaymentCard authentication code |  |
| Can send itself to payment subsystem |  |

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| PaymentType (abstract) | |
| *Superclass:* | |
| *Subclass:* PaymentCard, Voucher | |
| *Responsibilities:* | *Collaborators:* |
| Superclass representing the different payment types of payment that can be used | PaymentCard  Voucher |
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| PaymentCard | |
| *Superclass:* PaymentType | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains card details |  |
| Can verify itself |  |

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| Voucher | |
| *Superclass:* PaymentType | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains voucher details |  |
| Can verify itself |  |
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| Search Results | |
| *Superclass:* | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
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| Maintains a collection of Products that satisfy some set of search criteria | Product |
| Can sort itself |  |
| Can filter itself |  |
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| Location | |
| *Superclass:* | |
| *Subclass:* | |
| *Responsibilities:* | *Collaborators:* |
| Maintains information about a location |  |
| Has Name |  |
| Has Address information |  |
| Has Latitude and Longitude |  |