Dalton Murray

Systems Analysis and Design

INT 6123 – Systems Analysis and Design

Dr. Andrew Makar

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**IA #5 Spring Breaks R Us**

**Question 1 – For the use case Add new resort, write a fully developed use case description and draw an SSD. Review the classes that are associated with a resort in the domain model to understand the flow of activities and repetition involved.**

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| **Use Case Name** | Add new resort | |
| **Scenario** | Adding a new resort to the SBRU resort booking options | |
| **Triggering Event** | A resort contacts SBRU to list themselves as an available resort to book vacations at | |
| **Brief Description** | A new resort is attempting to be added to the resorts list at SBRU for students to be able to book vacations at. They supply SBRU with summary information and descriptive information such as their country, state/region/providence, address, phone number, email address, and other information such as packages and suites available and available accommodations and activities available for students. | |
| **Actors** | SBRU Managing Resorts Director, Resort Manager | |
| **Stakeholders** | SBRU Staff (direct connection), Resort Staff (direct connection), students wanting a vacation (direct-indirection connection) | |
| **Preconditions** | SBRU must be looking for new locations or be open to new locations and have systems available  The resort must not already be listed | |
| **Postconditions** | The resort is added to the SBRU resort locations and is now searchable by students if it is listed as having open rooms  Facilities and information such as accommodations are listed with the resort listing | |
| **Flow of Activities** | **Actor** | **System** |
| 1. Check that the resort does not exist  2. Check if SBRU is open to listings in the location  3. Enter basic resort information  4. Enter facilities information (open rooms, address, packages, suites) (loop – can change and go back to modify data)  5. Enter in accommodations information (wheelchair accessible, meals/food, overnight, braille) (loop – can change and go back to modify data) | 1.1 Lookup databases for existing resort information  2.1 Lookup databases to see if openings align with locations/check if we are open to a new listing™  3.1 Create new entry in resorts database  4.1 Create facilities information entry in database (modify facilities information entry)  5.1 Create accommodations entry in database (modify accommodations entry) |
| **Exception Conditions** | 1.1 Resort already exists/is listed in database | |

SSD is in attached PDF.

**Question 2 – For the use case Book a reservation, write a fully developed use case description and draw an SSD. Review the classes that are associated with a reservation in the domain model to understand the flow of activities and repetition involved.**

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| --- | --- | --- |
| **Use Case Name** | Book a reservation | |
| **Scenario** | Booking a new reservation at a resort through SBRU | |
| **Triggering Event** | A student is wanting to or trying to make a reservation through SBRU at a resort | |
| **Brief Description** | A student is browsing through different resorts looking at the facility information, accommodations available, and is looking at different resorts in an area. They also are trying to see what times check in/check out are, and if they can make an individual or group booking. | |
| **Actors** | Student | |
| **Stakeholders** | Student, SBRU, Resort | |
| **Preconditions** | Student must have an existing account when trying to create a booking  The resort they are trying to book at must exist in SBRU’s systems  The resort must be open to bookings | |
| **Postconditions** | The reservation will be created and connected with the student account and other members/group members  A payment amount and invoice will be created and connected with the account | |
| **Flow of Activities** | **Actor** | **System** |
| 1. Search/browse for a resort  2. Check availabilities, check in/out times, and dates available  3. Select reservation type/packages/suites  4. Request booking  5. Put in payment information | * 1. Display resort, facility, and accommodation information   2.1 Show availabilities, check in/out times, and dates available  4.1 Start creation of a booking (verify information in databases, opening, and everything is available)  5.1 Verify payment, create a transaction, display and send confirmation by email |
| **Exception Conditions** | 5.1 Payment fails/card declined | |

SSD is in attached PDF.

**Question 3 – Draw an activity diagram to show the flow of activities for the use case Add a new resort.**

Attached as PDF.

**Question 4 – Do a CRUD analysis based on the domain model you build in Chapter 4 and the use cases you have defined thus far.**

Create/Read/Update/Delete

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| --- | --- | --- | --- | --- | --- | --- |
| **Use cases v. domain classes** | **Traveler/**  **Student** | **Interests/**  **Hobbies** | **Post** | **Resort/**  **Party location** | **Networked**  **Connection** | **Invitee** |
| **Account creation** | C |  |  |  |  |  |
| **Account deletion** | D | D | D | D | D | D |
| **Lookup friends** | R | R | R | R | R | R |
| **Add/remove friends** | C/U/D |  |  |  |  |  |
| **Set privacy and security settings** | U |  |  |  |  |  |
| **Message friends** | C/R/U/D |  |  |  |  |  |
| **Voice call, video call friends** | C/R/U/D |  |  |  |  |  |
| **Randomize add friend** | C/R/U |  |  |  |  |  |
| **Set preferences and filters (distance, language, activities, group or individual)** | C/R/U/D | C/R/U/D |  | C/R/U/D | C/R/U/D |  |
| **Create group chat, add/remove people** | C/R/U/D |  |  |  | C/R/U/D | C/R/U/D |
| **Add pictures to profile and tag people and locations** | C/R/U/D |  | C/R/U/D |  | C/R/U/D | C/R/U/D |
| **Comment on other people’s profiles** |  |  | C/R/U/D |  | C/R/U/D | C/R/U/D |
| **View and interact with verification system** | C/R/U/D |  |  |  |  |  |
| **Change language of app** | R/U |  |  |  |  |  |
| **Create a booking** | C/R/U/D |  |  | C/R/U/D | C/R/U/D | C/R/U/D |

**References**

Satzinger, J. W., Jackson, R. B., & Burd, S. D. (2016). Systems analysis and design in a Changing World (7e ed.). Cengage Learning.

I have neither given nor received unauthorized aid in completing this work, nor have I presented someone else's work as my own.

*Dalton Murray*