

## Administrator's stories

1. As an administrator, I want to be able to login to Rent-A-Ride so that I can be authenticated and administer the Rent-A-Ride system.
  - a. correct user name and password enables an administrator to login into the system
  - b. if either user name or password is incorrect, an error message is displayed
  - c. an administrator can ask for a password reset (another US)
2. As an administrator, I want to be able to reset my password so that I can login to the system, even if I forget my password.
  - a. administrator's user name, first name, and last name are given
  - b. if either user name, first or last names are incorrect, an error message is displayed and the password is not reset
  - c. Rent-A-Ride creates a new password and an email is sent to administrator's email address with the new password
3. As an administrator, I want to be able to logout from Rent-A-Ride so that nobody else can use my account without first logging in.
  - a. no Rent-A-Ride functions (except for login and password reset) can be performed any longer by the administrator
4. As an administrator, I want to be able to set and update a membership price so that customers can register and pay for membership in Rent-A-Ride.
  - a. new value for the membership price is provided
  - b. if a non-positive value is provided, an error is reported and the membership price is not set
5. As an administrator, I want to be able to create and update a vehicle type so that vehicles can be classified according to their types.
  - a. vehicle type name is provided
  - b. if the provided name is not unique among vehicle types, an error message is displayed and the vehicle type is not created/updated
  - c. an administrator can set/update hourly rental price (another US)
6. As an administrator, I want to be able to set and update the hourly rental prices for a vehicle type so that the customers are properly charged for a vehicle rental time.
  - a. values for all of the data items (max hours, price) are provided and must be in appropriate formats; on create, all values are provided
  - b. if a non-positive value is provided for max hours or price, an error is reported and the hourly rental price is not created/updated
  - c. if the given max hours is the same in another already existing hourly rental price for the same vehicle type, an error is reported and the hourly rental price is not created/updated
7. As an administrator, I want to be able to set and update a late fee so that customers can be assessed a late charge for returning a vehicle past the reservation's allotted time.
  - a. new value for the late fee is provided
  - b. if a non-positive value is provided, an error is reported and the late fee is not changed
8. As an administrator, I want to be able to create and update a rental location so that I can assign vehicles to it.

- a. new values for any or all data items (name, address, and capacity) are provided and must be in appropriate formats; on create, all values are provided
  - b. if a non-positive value is provided for the capacity, an error is reported and the rental location is not created/updated
9. As an administrator, I want to be able to create and update a vehicle so that customers can rent it.
- a. new values for any or all data items (vehicle type, make, model, year, mileage, registration tag, last service date, and condition) are provided and must be in appropriate formats; on create, all values are provided
  - b. an administrator can assign a rental location for the vehicle (another US)
  - c. if a non-positive value is provided for the year or mileage, an error is reported and the rental location is not created/updated
10. As an administrator, I want to be able to assign a vehicle to a rental location so that customers can locate it.
- a. new rental location is provided
  - b. if the capacity of the rental location is exceeded, an error is reported and the rental location of the vehicle is not assigned
11. As an administrator, I want to be able to find and view a rental location so that I can oversee the state of the Rent-A-Ride system.
- a. the full or partial name and/or address of a rental location is provided and a list of matching rental locations is displayed
  - b. if an no partial name or address is provided, a full list of rental locations is displayed
  - c. if no rental locations matching the search are found, a suitable message is displayed
  - d. one rental location from a non-empty list can be selected by the administrator and the complete data for the selected rental location is displayed; vehicles at the location are displayed on demand; pending reservations at the location are displayed on demand; rentals (past or ongoing) at the location are displayed on demand
12. As an administrator, I want to be able to find a customer so that I can oversee the state of the Rent-A-Ride system.
- a. the full or partial first name and/or last name of a customer is provided and a list of matching customers is displayed
  - b. if an no partial names are provided, a full list of customers is displayed
  - c. if no customers matching the search are found, a suitable message is displayed
  - d. one customer from a non-empty list can be selected by the administrator and the complete data for the selected customer is displayed; reservations of the customer are displayed on demand; rentals (past or ongoing) of the customer are displayed on demand; comments of the customer are displayed on demand
  - e. an administrator can terminate the selected customer (another US)
13. As an administrator, I want to be able to browse vehicle reservations so that I can oversee the state of the Rent-A-Ride system. NOTE: this user story is similar to US 11 and US 12.
- a. the full list of pending reservations is displayed
14. As an administrator, I want to charge a customer for one hour, if a reservation is not used and not canceled at least an hour before the requested rental so that all reserved vehicles are utilized.
- a. Rent-A-Ride charges the customer who has canceled a reservation less than an hour before the reservation's start time for one hour of rental

- b. Rent-A-Ride charges the customer who has not picked up a reserved vehicle within an hour of the reservation's start time and the reservation length is updated to one hour so that the vehicle is available for rentals
- 15. As an administrator, I want to be able to browse customer comments so that I can maintain vehicles in good driving condition. NOTE: this user story is similar to US 12.
  - a. the full list of comments is displayed
- 16. As an administrator, I want to be able to terminate a customer's membership so that the customer may no longer use the system, if warranted.
  - a. Rent-A-Ride prevents the terminated customer from logging into the system
  - b. Rent-A-Ride cancels all reservations of the terminated customer
- 17. As an administrator, I want to be able to view and modify my profile so that it is up-to-date.
  - a. new values for any or all data items (first and last name, address, email, and password) can be provided and must be in appropriate formats
  - b. all attributes except for the user name (login name) can be changed

## Customer's stories

18. As a customer, I want to be able to register with Rent-A-Ride so that I can reserve and rent vehicles.
  - a. all required data items for a customer (first name, last name, address, email, user name password, license number, license state, credit card number and credit card expiration date) are provided and are in appropriate formats and
  - b. if the selected user name is not unique, an error message is displayed and customer record is not created
  - c. if registration is successful, the customer can login and use the system
  - d. the credit card is charged for the membership in Rent-A-Ride and the member until date is set correctly
19. As a customer, I want to be able to login to Rent-A-Ride so that I can be authenticated and use the system.
  - a. correct user name and password enables an customer to login into the system
  - b. if either user name or password is incorrect, an error message is displayed
  - c. if the customer has been terminated, an error message is displayed
  - d. if the membership of the customer has expired, the customer must renew the membership before other functions of the system are available (another US)
  - e. a customer can ask for a password reset (another US)
20. As a customer, I want to be able to reset my password so that I can login if I forget my password.
  - a. customer's user name, first name, and last name are given
  - b. if either user name, first or last names are incorrect, an error message is displayed and the password is not reset
  - c. Rent-A-Ride creates a new password and an email is sent to customer's address with the new password
21. As a customer, I want to be able to logout from Rent-A-Ride so that nobody else can use my account without first logging in.
  - a. after a logout, no system functions (except for login and password reset) can be performed any longer by an customer
22. As a customer, I want to be able to view and modify my customer profile so that I can keep it up-to-date.
  - a. new values for any or all data items (first name, last name, address, email, user name password, license number, license state, credit card number and credit card expiration date) can be provided and must be in appropriate formats
  - b. if the new user name is not unique, an error message is displayed and customer profile is not updated
  - c. a customer can renew the membership and if so, the credit card is charged for the membership in Rent-A-Ride and the member until date is set correctly
  - d. a customer can terminate the membership in Rent-A-Ride (another US)
23. As a customer, I want to be able to find a rental location so that I can place a reservation on a vehicle type at a location of my choice.
  - a. the full or partial name and/or address of a rental location is provided and a list of matching rental locations is displayed
  - b. if an no partial name or address is provided, a full list of rental locations is displayed
  - c. if no rental locations matching the search are found, a suitable message is displayed

- d. one rental location from a non-empty list can be selected by the customer and the complete data for the selected rental location is displayed; vehicles at the location are displayed on demand
  - e. the customer can make a reservation at the selected rental location (another US)
24. As a customer, I want to make a reservation for a vehicle type at a rental location of my choice so that I can rent a vehicle of that type, when and where I need it.
- a. values for all of the data items (pickup time, length, and vehicle type) are provided and must be in appropriate formats; on create, all values are provided
  - b. if the pickup time is in the past or if the length is non-positive or greater than 72 hours, an error message is displayed and the reservation is not created/updated
  - c. if a given vehicle type is not available, Rent-A-Ride suggests a different rental location (another US)
25. As a customer, I want Rent-A-Ride to suggest an alternative rental location to the one where my original vehicle type choice is not available so that I can make a reservation.
- a. Rent-A-Ride displays a list of alternative rental locations where a given vehicle type is available for the requested time and length and if the customer selects one of them, a reservation is created
26. As a customer, I want to be able to browse my reservations so that I can maintain them.
- a. a complete list of customer's reservations is displayed
  - b. a customer can cancel one of the reservations (another US)
27. As a customer, I want to be able to cancel my reservation, if I change my mind, so that I am not charged for an unwanted rental.
- a. a reservation is removed
28. As a customer, I want to be able to rent a vehicle and notify Rent-A-Ride, based on my prior reservation, so that I can drive the vehicle.
- a. Rent-A-Ride receives a notification that a specific vehicle is picked up and a customer's reservation exists
  - b. if a vehicle is of a correct vehicle type, at a correct rental location and time, as on a reservation, a rental record is created
  - c. if the rental location, pickup time, or vehicle type is not as on the reservation, an error is displayed and vehicle cannot be picked up
29. As a customer, I want to be able to return a rented vehicle and notify Rent-A-Ride so that I am charged only for the time I used the vehicle.
- a. Rent-A-Ride receives a notification of a specific vehicle being returned and a customer's rental record exists
  - b. a customer returns a vehicle at the correct rental location and the rental charges are computed correctly
  - c. a customer can comment on the rental experience (another US)
30. As a customer, I want to be able to comment on any problems with the rented vehicle or other issues so that these problems can be corrected by Rent-A-Ride.
- a. a customer provides a comment and/or sets a condition of the returned vehicle
31. As a customer, I want to be able to terminate my membership in Rent-A-Ride so that I am no longer a customer.

- a. Rent-A-Ride sets the status of the customer as terminated
- b. the customer can no longer use Rent-A-Ride's services

### **Management's non-functional stories**

- 32. As a manager, I want the system to be implemented in C++ or Java so that our staff can maintain it.
- 33. As a manager, I want the user interface to be easy-to-use so that an administrator and customers can use the system easily and effectively.
- 34. As a manager, I want multiple customers to be able to use the system at the same time so that the system does not impede the rental business.
- 35. As a manager, I want the system to use the MySQL RDBMS so that Rent-A-Ride's cost is low.
- 36. As a manager, I want the system to use established standards so that our staff can maintain it.