Hacker can install malware to software or website after entering the system. So, when customer use the system, credit card info that was send to the system will also send to the hacker

Steal customer credit card info (E-skimming)

To

Install malware

Brute force password

Data / Password Sniffing

Update “current promo” page

Hacker

List products for auction

Login

Marketing dept staff

Customer

Steal credit card info (E-skimming)

Login

Bids on Auction

Reviews Products

Orders Products

Searches Products

Create Account

Impersonate

Data / Password Sniffing

Brute force password

Hacker

Authenticate

|  |  |  |
| --- | --- | --- |
| S/N | Software Requirement | **Security Requirement** |
| 1 | Customers must register with the ***sBooks*** portal before they are allowed to purchase ebooks with their credit cards | Data Input Validation (For customer register detail) – Integrity  Customer account detail (Private and Protected data) - Confidentiality  Errors should have general message – Error Management  Valid credit cards - Availability |
| 2 | eBooks are copyrighted, hence, customers should not be able to reproduce or distribute them in an unauthorized manner | Session timeout (No viewing of eBook after session ends) – Session Management  Password lock – Authentication  Digital signature – Non-Repudiation  Errors should have general message – Error Management |
| 3 | P.O. Box addresses will not be accepted as a valid shipping location | Data Input Validation (Only shipping location) – Integrity  Valid shipping address/location - Availability  Shipping location (Private and Protected data) - Confidentiality  Errors should have general message – Error Management |
| 4 | Customers must be allowed to search for ebooks | Data Input Validation (Only ebook name) – Integrity  Errors should have general message – Error Management |
| 5 | Customers can provide ratings & reviews only about the products they have purchased. | Customer purchased detail (Private and Protected data) – Confidentiality  Valid purchased detail – Availability  Errors should have general message – Error Management |
| 6 | Customers should be allowed to view an excerpt from the ebook | Valid ebook excerpt – Availability  Errors should have general message – Error Management |
| 7 | Customers can purchase the entire ebook or just selected chapters | Data Input Validation (entire ebook or selected chapter) – Integrity  Valid ebook – Availability  Valid ebook chapter – Availability  Errors should have general message – Error Management |
| 8 | Only specific staff from the Marketing department of ***sBooks*** should be able to update the “current promotions” page and list products for auction | Login system – Authentication  Staff permission on system – Authorization  Data Input Validation (login username and password) – Integrity  Errors should have general message – Error Management |
| 9 | Customers of ***sBooks*** need not create a new account on *eBid.com* | Customer account detail (Private and Protected data) – Confidentiality  Allow to login to ebid.com – Authorization  Errors should have general message – Error Management |
| 10 | The highest bidder at the end of the auction period will be the winner of the product | Data Input Validation (bid price) – Integrity  Valid price – Availability  Errors should have general message – Error Management |
| 11 | This portal will be developed in-house | User account (for staff and administrator) – Authentication  User permission (for staff and administrator) – Authorization  Digital Signatures – Non-Repudiation  Timestamps – Non-Repudiation |