1. Duplicated Search Result
   User enter home.
   Next, leave the input box of search blank.
   Then, click search button.

   Expected result:
There should be only one warning message shown

   Actual result:
   Search warning is duplicated

2. System crashes when registering
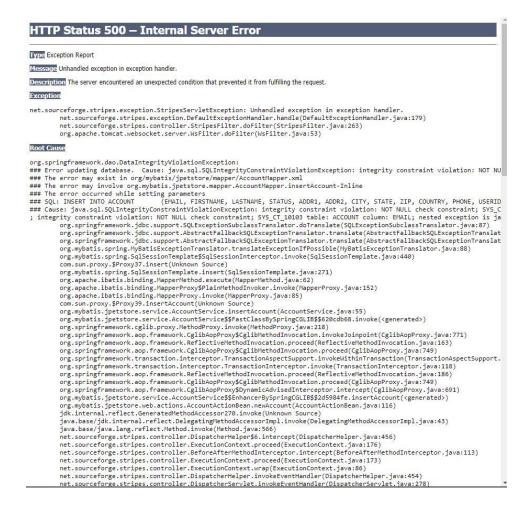   User enter home page and click 'Sign In'
   Next, click 'Register Now!' and input 'User Information' and leave 'Account Information' blank.
   Then, click 'Save Account Information'.

   Expected result:
   A warning message should be shown and remind users filling up the 'Account Information'

   Actual result:
   System crashed.

HTTP Status 500 – Internal Server Error

Type Exception Report

Message Unhandled exception in exception handler.

Description The server encountered an unexpected condition that prevented it from fulfilling the request.

Exception

```
net.sourceforge.stripes.exception.StripesServletException: Unhandled exception in exception handler.
    net.sourceforge.stripes.exception.DefaultExceptionHandler.handle(DefaultExceptionHandler.java:179)
    net.sourceforge.stripes.controller.StripesFilter.doFilter(StripesFilter.java:263)
    org.apache.tomcat.websocket.server.WsFilter.doFilter(WsFilter.java:53)
```

Root Cause

```
org.springframework.dao.DataIntegrityViolationException:
### Error updating database.  Cause: java.sql.SQLIntegrityConstraintViolationException: integrity constraint violation: NOT NU
### The error may exist in org/mybatis/jpetstore/mapper/AccountMapper.xml
### The error may involve org.mybatis.jpetstore.mapper.AccountMapper.insertAccount-Inline
### The error occurred while setting parameters
### SQL: INSERT INTO ACCOUNT        (EMAIL, FIRSTNAME, LASTNAME, STATUS, ADDR1, ADDR2, CITY, STATE, ZIP, COUNTRY, PHONE, USERID
### Cause: java.sql.SQLIntegrityConstraintViolationException: integrity constraint violation: NOT NULL check constraint; SYS_C
; integrity constraint violation: NOT NULL check constraint; SYS_CT_10103 table: ACCOUNT column: EMAIL; nested exception is ja
    org.springframework.jdbc.support.SQLExceptionSubclassTranslator.doTranslate(SQLExceptionSubclassTranslator.java:87)
    org.springframework.jdbc.support.AbstractFallbackSQLExceptionTranslator.translate(AbstractFallbackSQLExceptionTranslat
    org.springframework.jdbc.support.AbstractFallbackSQLExceptionTranslator.translate(AbstractFallbackSQLExceptionTranslat
    org.mybatis.spring.MyBatisExceptionTranslator.translateExceptionIfPossible(MyBatisExceptionTranslator.java:88)
    org.mybatis.spring.SqlSessionTemplate$SqlSessionInterceptor.invoke(SqlSessionTemplate.java:440)
    com.sun.proxy.$Proxy37.insert(Unknown Source)
    org.mybatis.spring.SqlSessionTemplate.insert(SqlSessionTemplate.java:271)
    org.apache.ibatis.binding.MapperMethod.execute(MapperMethod.java:62)
    org.apache.ibatis.binding.MapperProxy$PlainMethodInvoker.invoke(MapperProxy.java:152)
    org.apache.ibatis.binding.MapperProxy.invoke(MapperProxy.java:85)
    com.sun.proxy.$Proxy39.insertAccount(Unknown Source)
    org.mybatis.jpetstore.service.AccountService.insertAccount(AccountService.java:55)
    org.mybatis.jpetstore.service.AccountService$$FastClassBySpringCGLIB$$620cdb68.invoke(<generated>)
    org.springframework.cglib.proxy.MethodProxy.invoke(MethodProxy.java:218)
    org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.invokeJoinpoint(CglibAopProxy.java:771)
    org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(ReflectiveMethodInvocation.java:163)
    org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.proceed(CglibAopProxy.java:749)
    org.springframework.transaction.interceptor.TransactionAspectSupport.invokeWithinTransaction(TransactionAspectSupport.
    org.springframework.transaction.interceptor.TransactionInterceptor.invoke(TransactionInterceptor.java:118)
    org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(ReflectiveMethodInvocation.java:186)
    org.springframework.aop.framework.CglibAopProxy$CglibMethodInvocation.proceed(CglibAopProxy.java:749)
    org.springframework.aop.framework.CglibAopProxy$DynamicAdvisedInterceptor.intercept(CglibAopProxy.java:691)
    org.mybatis.jpetstore.service.AccountService$$EnhancerBySpringCGLIB$$2d5984fe.insertAccount(<generated>)
    org.mybatis.jpetstore.web.actions.AccountActionBean.newAccount(AccountActionBean.java:116)
    jdk.internal.reflect.GeneratedMethodAccessor270.invoke(Unknown Source)
    java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
    java.base/java.lang.reflect.Method.invoke(Method.java:566)
    net.sourceforge.stripes.controller.DispatcherHelper$6.intercept(DispatcherHelper.java:456)
    net.sourceforge.stripes.controller.ExecutionContext.proceed(ExecutionContext.java:176)
    net.sourceforge.stripes.controller.BeforeAfterMethodInterceptor.intercept(BeforeAfterMethodInterceptor.java:113)
    net.sourceforge.stripes.controller.ExecutionContext.proceed(ExecutionContext.java:173)
    net.sourceforge.stripes.controller.ExecutionContext.wrap(ExecutionContext.java:86)
    net.sourceforge.stripes.controller.DispatcherHelper.invokeEventHandler(DispatcherHelper.java:454)
    net.sourceforge.stripes.controller.DispatcherServlet.invokeEventHandler(DispatcherServlet.java:278)
```

3. Decimal should not be allowed in quantity

   User enter home page and click 'Fish'
   Next, click 'FI-SW-01' and click the first 'Add to Cart'.
   Then, input a decimal in 'Quantity' box and click 'Update Cart'

   Expected result:
   A warning message should be shown like "only integer is allowed"
   Actual result:
   The decimal will be rounded to integer.

4. System crash when checking out

   User enter home page and click 'Fish'
   Next, click 'FI-SW-01' and click the first 'Add to Cart'.
   Then, click 'Update Cart' and 'Proceed to Checkout'.
   Last, input Payment Details and leave 'Expiry Date' blank and then click 'Continue'

   Expected result:
   Pop up a warning to require inputting 'Expiry Date'.

   Actual result:

Enter the confirm page and if click 'Confirm', the system will crash.

```
HTTP Status 500 – Internal Server Error

Type Exception Report

Message Unhandled exception in exception handler.

Description The server encountered an unexpected condition that prevented it from fulfilling the request.

Exception

net.sourceforge.stripes.exception.StripesServletException: Unhandled exception in exception handler.
        net.sourceforge.stripes.exception.DefaultExceptionHandler.handle(DefaultExceptionHandler.java:179)
        net.sourceforge.stripes.controller.StripesFilter.doFilter(StripesFilter.java:263)
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### Cause: java.sql.SQLIntegrityConstraintViolationException: integrity constraint violation: NOT NULL check constraint; SYS_C
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        org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(ReflectiveMethodInvocation.java:163)
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        org.springframework.transaction.interceptor.TransactionInterceptor.invoke(TransactionInterceptor.java:118)
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        org.springframework.aop.framework.CglibAopProxy$DynamicAdvisedInterceptor.intercept(CglibAopProxy.java:691)
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        java.base/java.lang.reflect.Method.invoke(Method.java:566)
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        net.sourceforge.stripes.controller.BeforeAfterMethodInterceptor.intercept(BeforeAfterMethodInterceptor.java:113)
        net.sourceforge.stripes.controller.ExecutionContext.proceed(ExecutionContext.java:173)
        net.sourceforge.stripes.controller.ExecutionContext.wrap(ExecutionContext.java:86)
        net.sourceforge.stripes.controller.DispatcherHelper.invokeEventHandler(DispatcherHelper.java:454)
        net.sourceforge.stripes.controller.DispatcherServlet.invokeEventHandler(DispatcherServlet.java:278)
```

5. None digit should not be allowed

   User enter home page and click 'Fish'
   Next, click 'FI-SW-01' and click the first 'Add to Cart'.
   Then, input a large number(e.g. 1000000000)or a none digit(e.g. aaa) in 'Quantity' box and   click 'Update Cart'

   Expected result:
   Pop up a warning to require an integer

   Actual result:
   Invalid characters / invalid number format will be converted to 1 automatically