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016 \*/  
017package org.apache.commons.collections4.functors;  
018  
019import java.io.Serializable;  
020  
021import org.apache.commons.collections4.Predicate;  
022  
023/\*\*  
024 \* Predicate implementation that returns true if both the predicates return true.  
025 \*  
026 \* @since 3.0  
027 \*/  
028public final class AndPredicate<T> implements PredicateDecorator<T>, Serializable {  
029  
030 /\*\* Serial version UID \*/  
031 private static final long serialVersionUID = 4189014213763186912L;  
032  
033 /\*\* The array of predicates to call \*/  
034 private final Predicate<? super T> iPredicate1;  
035 /\*\* The array of predicates to call \*/  
036 private final Predicate<? super T> iPredicate2;  
037  
038 /\*\*  
039 \* Factory to create the predicate.  
040 \*  
041 \* @param <T> the type that the predicate queries  
042 \* @param predicate1 the first predicate to check, not null  
043 \* @param predicate2 the second predicate to check, not null  
044 \* @return the <code>and</code> predicate  
045 \* @throws NullPointerException if either predicate is null  
046 \*/  
047 public static <T> Predicate<T> andPredicate(final Predicate<? super T> predicate1,  
048 final Predicate<? super T> predicate2) {  
049 if (predicate1 == null || predicate2 == null) {  
050 throw new NullPointerException("Predicate must not be null");  
051 }  
052 return new AndPredicate<>(predicate1, predicate2);  
053 }  
054  
055 /\*\*  
056 \* Constructor that performs no validation.  
057 \* Use <code>andPredicate</code> if you want that.  
058 \*  
059 \* @param predicate1 the first predicate to check, not null  
060 \* @param predicate2 the second predicate to check, not null  
061 \*/  
062 public AndPredicate(final Predicate<? super T> predicate1, final Predicate<? super T> predicate2) {  
063 super();  
064 iPredicate1 = predicate1;  
065 iPredicate2 = predicate2;  
066 }  
067  
068 /\*\*  
069 \* Evaluates the predicate returning true if both predicates return true.  
070 \*  
071 \* @param object the input object  
072 \* @return true if both decorated predicates return true  
073 \*/  
074 @Override  
075 public boolean evaluate(final T object) {  
076 return iPredicate1.evaluate(object) && iPredicate2.evaluate(object);  
077 }  
078  
079 /\*\*  
080 \* Gets the two predicates being decorated as an array.  
081 \*  
082 \* @return the predicates  
083 \* @since 3.1  
084 \*/  
085 @Override  
086 @SuppressWarnings("unchecked")  
087 public Predicate<? super T>[] getPredicates() {  
088 return new Predicate[] {iPredicate1, iPredicate2};  
089 }  
090  
091}