```
options(repos = c(CRAN = "https://cloud.r-project.org/"))
#Watches
# Install and load the rvest package
#if (!requireNamespace("rvest", quietly = TRUE)) {
  install.packages("rvest")
## package 'rvest' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
## C:\Users\Matteeuu\AppData\Local\Temp\Rtmpczezmz\downloaded_packages
#}
library(rvest)
## Warning: package 'rvest' was built under R version 4.4.2
library(polite)
## Warning: package 'polite' was built under R version 4.4.2
# Read the HTML file
url <- "https://www.amazon.com/s?i=specialty-aps&bbn=16225019011&rh=n%3A7141123011%2Cn%3A16225019011%2C
session <- bow(url, user_agent = "Student's Demo Educational")</pre>
session
## <polite session> https://www.amazon.com/s?i=specialty-aps&bbn=16225019011&rh=n%3A7141123011%2Cn%3A16
##
       User-agent: Student's Demo Educational
##
       robots.txt: 137 rules are defined for 4 bots
##
      Crawl delay: 5 sec
     The path is scrapable for this user-agent
session_page <- scrape(session)</pre>
# Find all div elements with the specified class
div_elements <- html_nodes(session_page, 'div.sg-col-4-of-24.sg-col-4-of-12.s-result-item.s-asin.sg-col
# Create empty vectors to store data
links <- character()</pre>
img_srcs <- character()</pre>
titles <- character()</pre>
prices <- character()</pre>
ratings <- character()</pre>
max_products <- 29</pre>
# Limit the loop to only collect data for the first 30 products
for (i in 1:min(length(div_elements), max_products)) {
  div_element <- div_elements[i]</pre>
```

```
a_element <- html_node(div_element, 'a.a-link-normal.s-no-outline')</pre>
  link <- ifelse(!is.na(a element), paste0("https://amazon.com", html attr(a element, "href")), '')
  # Find the img element with class="s-image" and get the link
  img_element <- html_node(div_element, 'img.s-image')</pre>
  img_src <- ifelse(!is.na(img_element), html_attr(img_element, "src"), '')</pre>
  # Find the span element with class="a-size-base-plus a-color-base a-text-normal" and get the title
  title_element <- html_node(div_element, 'span.a-size-base-plus.a-color-base.a-text-normal')
  title <- ifelse(!is.na(title_element), html_text(title_element), '')</pre>
  # Find the span element with class="a-price-whole" and get the price
  price_element <- html_node(div_element, 'span.a-price-whole')</pre>
  price <- ifelse(!is.na(price_element), html_text(price_element), '')</pre>
  # Find the span element with class="a-icon-alt" and get the ratings
  rating_element <- html_node(div_element, 'span.a-icon-alt')</pre>
  rating <- ifelse(!is.na(rating_element), html_text(rating_element), '')</pre>
  # Append data to vectors
 links <- c(links, link)</pre>
  img_srcs <- c(img_srcs, img_src)</pre>
 titles <- c(titles, title)</pre>
 prices <- c(prices, price)</pre>
 ratings <- c(ratings, rating)</pre>
# Create a data frame with the scraped data
product_df <- data.frame(</pre>
 Links = links,
 Images = img_srcs,
 Title = titles,
 Price = prices,
 Rating = ratings
# Write the data to a CSV file
write.csv(product_df, "WatchMeWhip.csv", row.names = FALSE)
#catSupplies
# Install and load the rvest package
#if (!requireNamespace("rvest", quietly = TRUE)) {
install.packages("rvest")
## Warning: package 'rvest' is in use and will not be installed
#}
library(rvest)
library(polite)
# Read the HTML file
url <- "https://www.amazon.com/s?i=specialty-aps&bbn=16225013011&rh=n%3A%2116225013011%2Cn%3A2975241011
```

# Find the a element with class="a-link-normal s-no-outline" and get the link

```
session <- bow(url, user_agent = "Student's Demo Educational")</pre>
session
## <polite session> https://www.amazon.com/s?i=specialty-aps&bbn=16225013011&rh=n%3A%2116225013011%2Cn%
       User-agent: Student's Demo Educational
##
       robots.txt: 137 rules are defined for 4 bots
##
      Crawl delay: 5 sec
##
     The path is scrapable for this user-agent
session_page <- scrape(session)</pre>
# Find all div elements with the specified class
div_elements <- html_nodes(session_page, 'div.sg-col-4-of-24.sg-col-4-of-12.s-result-item.s-asin.sg-col
# Create empty vectors to store data
links <- character()</pre>
img_srcs <- character()</pre>
titles <- character()</pre>
prices <- character()</pre>
ratings <- character()</pre>
max_products <- 29</pre>
# Limit the loop to only collect data for the first 30 products
for (i in 1:min(length(div_elements), max_products)) {
  div_element <- div_elements[i]</pre>
  # Find the a element with class="a-link-normal s-no-outline" and get the link
  a_element <- html_node(div_element, 'a.a-link-normal.s-no-outline')</pre>
  link <- ifelse(!is.na(a_element), paste0("https://amazon.com", html_attr(a_element, "href")), '')</pre>
  # Find the img element with class="s-image" and get the link
  img_element <- html_node(div_element, 'img.s-image')</pre>
  img_src <- ifelse(!is.na(img_element), html_attr(img_element, "src"), '')</pre>
  # Find the span element with class="a-size-base-plus a-color-base a-text-normal" and get the title
  title_element <- html_node(div_element, 'span.a-size-base-plus.a-color-base.a-text-normal')
  title <- ifelse(!is.na(title_element), html_text(title_element), '')</pre>
  # Find the span element with class="a-price-whole" and get the price
  price_element <- html_node(div_element, 'span.a-price-whole')</pre>
  price <- ifelse(!is.na(price_element), html_text(price_element), '')</pre>
  # Find the span element with class="a-icon-alt" and get the ratings
  rating_element <- html_node(div_element, 'span.a-icon-alt')</pre>
  rating <- ifelse(!is.na(rating_element), html_text(rating_element), '')</pre>
  # Append data to vectors
  links <- c(links, link)</pre>
  img_srcs <- c(img_srcs, img_src)</pre>
  titles <- c(titles, title)</pre>
  prices <- c(prices, price)</pre>
  ratings <- c(ratings, rating)</pre>
```

```
# Create a data frame with the scraped data
product_df <- data.frame(</pre>
  Links = links,
  Images = img_srcs,
 Title = titles,
 Price = prices,
 Rating = ratings
# Write the data to a CSV file
write.csv(product_df, "CatSupplies.csv", row.names = FALSE)
#Furniture
# Install and load the rvest package
#if (!requireNamespace("rvest", quietly = TRUE)) {
  install.packages("rvest")
## Warning: package 'rvest' is in use and will not be installed
#}
library(rvest)
library(polite)
# Read the HTML file
url <- "https://www.amazon.com/s?i=specialty-aps&bbn=16225011011&rh=n%3A%2116225011011%2Cn%3A1063306&re
session <- bow(url, user_agent = "Student's Demo Educational")</pre>
## <polite session> https://www.amazon.com/s?i=specialty-aps&bbn=16225011011&rh=n%3A%2116225011011%2Cn%
##
       User-agent: Student's Demo Educational
##
       robots.txt: 137 rules are defined for 4 bots
      Crawl delay: 5 sec
##
##
     The path is scrapable for this user-agent
session_page <- scrape(session)</pre>
# Find all div elements with the specified class
div_elements <- html_nodes(session_page, 'div.sg-col-4-of-24.sg-col-4-of-12.s-result-item.s-asin.sg-col
# Create empty vectors to store data
links <- character()</pre>
img_srcs <- character()</pre>
titles <- character()</pre>
prices <- character()</pre>
ratings <- character()</pre>
max_products <- 29</pre>
# Limit the loop to only collect data for the first 30 products
for (i in 1:min(length(div_elements), max_products)) {
```

```
div_element <- div_elements[i]</pre>
  # Find the a element with class="a-link-normal s-no-outline" and get the link
  a_element <- html_node(div_element, 'a.a-link-normal.s-no-outline')</pre>
  link <- ifelse(!is.na(a_element), paste0("https://amazon.com", html_attr(a_element, "href")), '')</pre>
  # Find the img element with class="s-image" and get the link
  img element <- html node(div element, 'img.s-image')</pre>
  img_src <- ifelse(!is.na(img_element), html_attr(img_element, "src"), '')</pre>
  # Find the span element with class="a-size-base-plus a-color-base a-text-normal" and get the title
  title_element <- html_node(div_element, 'span.a-size-base-plus.a-color-base.a-text-normal')</pre>
  title <- ifelse(!is.na(title_element), html_text(title_element), '')</pre>
  # Find the span element with class="a-price-whole" and get the price
  price_element <- html_node(div_element, 'span.a-price-whole')</pre>
  price <- ifelse(!is.na(price_element), html_text(price_element), '')</pre>
  # Find the span element with class="a-icon-alt" and get the ratings
  rating_element <- html_node(div_element, 'span.a-icon-alt')</pre>
  rating <- ifelse(!is.na(rating_element), html_text(rating_element), '')</pre>
  # Append data to vectors
  links <- c(links, link)</pre>
  img_srcs <- c(img_srcs, img_src)</pre>
 titles <- c(titles, title)</pre>
 prices <- c(prices, price)</pre>
 ratings <- c(ratings, rating)</pre>
# Create a data frame with the scraped data
product_df <- data.frame(</pre>
 Links = links,
 Images = img_srcs,
 Title = titles,
 Price = prices,
 Rating = ratings
# Write the data to a CSV file
write.csv(product_df, "Furniture.csv", row.names = FALSE)
#CellphoneAccessories
# Install and load the rvest package
#if (!requireNamespace("rvest", quietly = TRUE)) {
install.packages("rvest")
## Warning: package 'rvest' is in use and will not be installed
#}
library(rvest)
library(polite)
# Read the HTML file
```

```
url <- "https://www.amazon.com/s?i=specialty-aps&bbn=16225009011&rh=n%3A%2116225009011%2Cn%3A2811119011
session <- bow(url, user_agent = "Student's Demo Educational")</pre>
## <polite session> https://www.amazon.com/s?i=specialty-aps&bbn=16225009011&rh=n%3A%2116225009011%2Cn%
       User-agent: Student's Demo Educational
       robots.txt: 137 rules are defined for 4 bots
##
##
      Crawl delay: 5 sec
     The path is scrapable for this user-agent
##
session_page <- scrape(session)</pre>
# Find all div elements with the specified class
div_elements <- html_nodes(session_page, 'div.sg-col-4-of-24.sg-col-4-of-12.s-result-item.s-asin.sg-col
# Create empty vectors to store data
links <- character()</pre>
img srcs <- character()</pre>
titles <- character()</pre>
prices <- character()</pre>
ratings <- character()</pre>
max_products <- 29</pre>
# Limit the loop to only collect data for the first 30 products
for (i in 1:min(length(div_elements), max_products)) {
  div_element <- div_elements[i]</pre>
  # Find the a element with class="a-link-normal s-no-outline" and get the link
  a_element <- html_node(div_element, 'a.a-link-normal.s-no-outline')</pre>
  link <- ifelse(!is.na(a_element), paste0("https://amazon.com", html_attr(a_element, "href")), '')</pre>
  # Find the img element with class="s-image" and get the link
  img_element <- html_node(div_element, 'img.s-image')</pre>
  img_src <- ifelse(!is.na(img_element), html_attr(img_element, "src"), '')</pre>
  # Find the span element with class="a-size-base-plus a-color-base a-text-normal" and get the title
  title_element <- html_node(div_element, 'span.a-size-base-plus.a-color-base.a-text-normal')</pre>
  title <- ifelse(!is.na(title_element), html_text(title_element), '')</pre>
  # Find the span element with class="a-price-whole" and get the price
  price_element <- html_node(div_element, 'span.a-price-whole')</pre>
  price <- ifelse(!is.na(price_element), html_text(price_element), '')</pre>
  # Find the span element with class="a-icon-alt" and get the ratings
  rating_element <- html_node(div_element, 'span.a-icon-alt')</pre>
  rating <- ifelse(!is.na(rating_element), html_text(rating_element), '')</pre>
  # Append data to vectors
  links <- c(links, link)</pre>
  img_srcs <- c(img_srcs, img_src)</pre>
  titles <- c(titles, title)
```

```
prices <- c(prices, price)</pre>
  ratings <- c(ratings, rating)</pre>
# Create a data frame with the scraped data
product_df <- data.frame(</pre>
 Links = links,
 Images = img_srcs,
 Title = titles,
 Price = prices,
 Rating = ratings
# Write the data to a CSV file
write.csv(product_df, "CellphonesAccessories.csv", row.names = FALSE)
#Sports&Fitness
# Install and load the rvest package
#if (!requireNamespace("rvest", quietly = TRUE)) {
install.packages("rvest")
## Warning: package 'rvest' is in use and will not be installed
#}
library(rvest)
library(polite)
# Read the HTML file
url <- "https://www.amazon.com/s?i=specialty-aps&bbn=16225014011&rh=n%3A%2116225014011%2Cn%3A1097118101
session <- bow(url, user_agent = "Student's Demo Educational")</pre>
session
## <polite session> https://www.amazon.com/s?i=specialty-aps&bbn=16225014011&rh=n%3A%2116225014011%2Cn%
       User-agent: Student's Demo Educational
##
       robots.txt: 137 rules are defined for 4 bots
##
      Crawl delay: 5 sec
     The path is scrapable for this user-agent
session_page <- scrape(session)</pre>
# Find all div elements with the specified class
div_elements <- html_nodes(session_page, 'div.sg-col-4-of-24.sg-col-4-of-12.s-result-item.s-asin.sg-col
# Create empty vectors to store data
links <- character()</pre>
img_srcs <- character()</pre>
titles <- character()</pre>
prices <- character()</pre>
ratings <- character()
max_products <- 29</pre>
```

```
# Limit the loop to only collect data for the first 30 products
for (i in 1:min(length(div_elements), max_products)) {
  div_element <- div_elements[i]</pre>
  # Find the a element with class="a-link-normal s-no-outline" and get the link
  a_element <- html_node(div_element, 'a.a-link-normal.s-no-outline')</pre>
  link <- ifelse(!is.na(a_element), paste0("https://amazon.com", html_attr(a_element, "href")), '')</pre>
  # Find the img element with class="s-image" and get the link
  img_element <- html_node(div_element, 'img.s-image')</pre>
  img_src <- ifelse(!is.na(img_element), html_attr(img_element, "src"), '')</pre>
  # Find the span element with class="a-size-base-plus a-color-base a-text-normal" and get the title
  title_element <- html_node(div_element, 'span.a-size-base-plus.a-color-base.a-text-normal')
  title <- ifelse(!is.na(title_element), html_text(title_element), '')</pre>
  # Find the span element with class="a-price-whole" and get the price
  price_element <- html_node(div_element, 'span.a-price-whole')</pre>
  price <- ifelse(!is.na(price_element), html_text(price_element), '')</pre>
  # Find the span element with class="a-icon-alt" and get the ratings
  rating_element <- html_node(div_element, 'span.a-icon-alt')</pre>
  rating <- ifelse(!is.na(rating_element), html_text(rating_element), '')</pre>
  # Append data to vectors
  links <- c(links, link)</pre>
  img_srcs <- c(img_srcs, img_src)</pre>
 titles <- c(titles, title)</pre>
  prices <- c(prices, price)</pre>
 ratings <- c(ratings, rating)</pre>
# Create a data frame with the scraped data
product_df <- data.frame(</pre>
 Links = links,
 Images = img_srcs,
 Title = titles,
 Price = prices,
 Rating = ratings
# Write the data to a CSV file
write.csv(product_df, "SportsFitness.csv", row.names = FALSE)
```