@startuml

' Boundary Classes

class AvailabilityBoundary <<Boundary>> {

+commands: List<String>

+check\_availability()

+start\_monitoring\_availability()

+stop\_monitoring\_availability()

}

class BotBoundary <<Boundary>> {

+commands: List<String>

+project\_help()

+stop\_bot()

+receive\_email()

}

class BrowserBoundary <<Boundary>> {

+browser\_status: Boolean

+current\_url: String

+launch\_browser()

+close\_browser()

+login()

+navigate\_to\_website()

}

class PriceBoundary <<Boundary>> {

+current\_price: Double

+monitoring\_status: Boolean

+get\_price()

+start\_monitoring\_price()

+stop\_monitoring\_price()

}

' Control Classes

class AvailabilityControl <<Control>> {

+monitoring\_active: Boolean

+scheduled\_tasks: List<Task>

+receive\_command()

+check\_availability()

+start\_monitoring\_availability()

+stop\_monitoring\_availability()

}

class BotControl <<Control>> {

+active\_sessions: Integer

+receive\_command()

+project\_help()

+stop\_bot()

+receive\_email()

}

class BrowserControl <<Control>> {

+browser\_instance: Object

+receive\_command()

+launch\_browser()

+navigate\_to\_website()

+login()

+close\_browser()

}

class PriceControl <<Control>> {

+price\_history: List<Double>

+monitoring\_active: Boolean

+receive\_command()

+get\_price()

+start\_monitoring\_price()

+stop\_monitoring\_price()

}

' Entity Classes

class AvailabilityEntity <<Entity>> {

+availability\_data: List<Data>

+last\_checked: DateTime

+check\_availability()

+export\_data()

}

class BrowserEntity <<Entity>> {

+cookies: List<Cookie>

+session\_data: Map<String, String>

+launch\_browser()

+navigate\_to\_website()

+close\_browser()

+login()

}

class DataExportEntity <<Entity>> {

+file\_paths: List<String>

+export\_to\_excel()

+export\_to\_html()

}

class EmailEntity <<Entity>> {

+email\_queue: List<Email>

+send\_email\_with\_attachments()

}

class PriceEntity <<Entity>> {

+price\_data: Map<String, Double>

+last\_updated: DateTime

+get\_price()

+export\_data()

}

' Relationships

AvailabilityBoundary --> AvailabilityControl

BotBoundary --> BotControl

BrowserBoundary --> BrowserControl

PriceBoundary --> PriceControl

AvailabilityControl --> AvailabilityEntity

AvailabilityControl ---> DataExportEntity

AvailabilityControl ---> EmailEntity

PriceControl --> PriceEntity

PriceControl ---> DataExportEntity

PriceControl ---> EmailEntity

BrowserControl --> BrowserEntity

@enduml

