

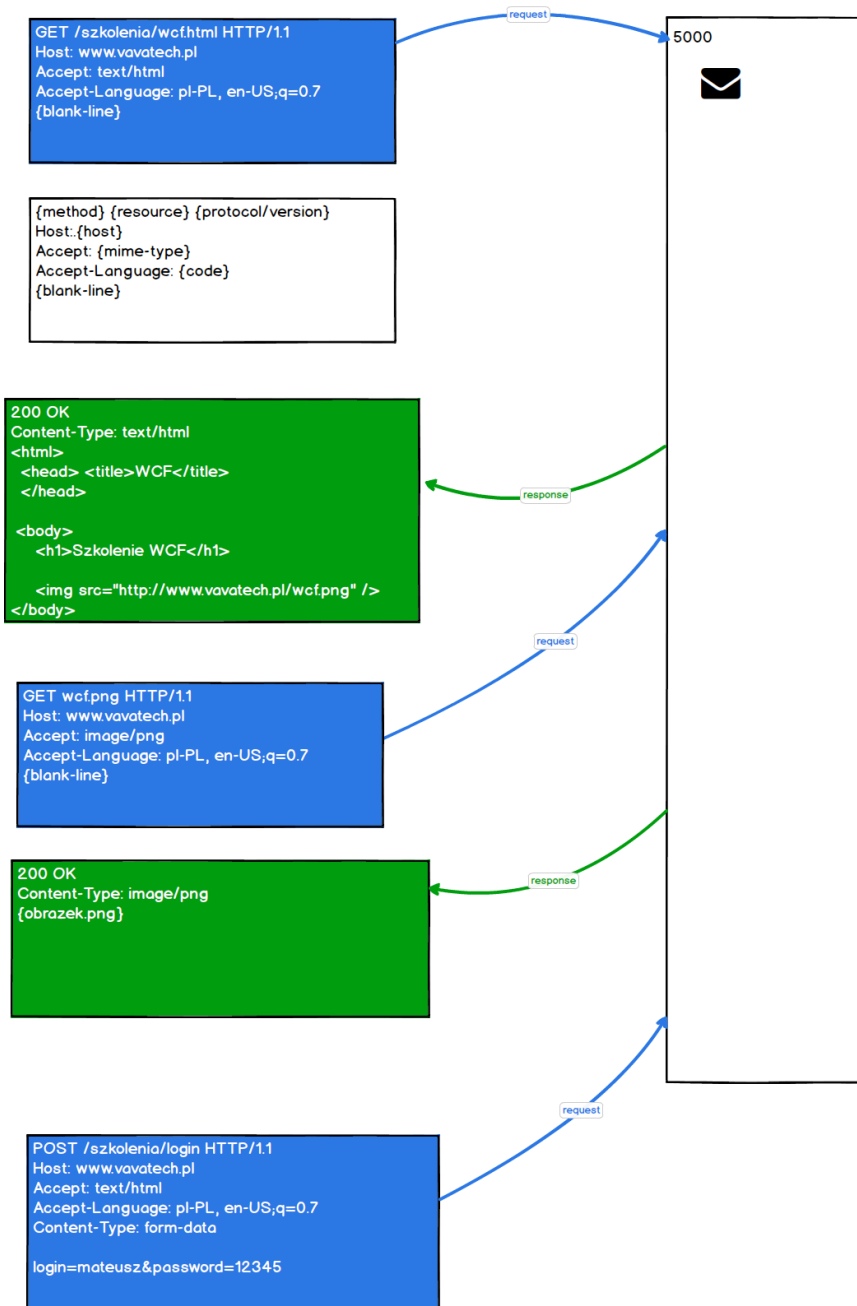
A Web Page

http://www.vavatech.pl/szkolenia/wcf.html

Login

Hasło

~~GET /szkolenia/login?login=mateusz&password=12345 HTTP/1.1~~  
~~Host: www.vavatech.pl~~  
~~Accept: text/html~~  
~~Accept-Language: pl-PL, en-US;q=0.7~~  
~~(blank-line)~~



```
POST HelloService.svc HTTP/1.1
Host: localhost
Accept: application/xml
Content-Type: application/xml

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope">
  <s:Header>
  </s:Header>
  <s:Body>
    <AddCustomer>
      <FirstName>John</FirstName>
      <LastName>Smith</LastName>
    </AddCustomer>
  </s:Body>
</s:Envelope>
```

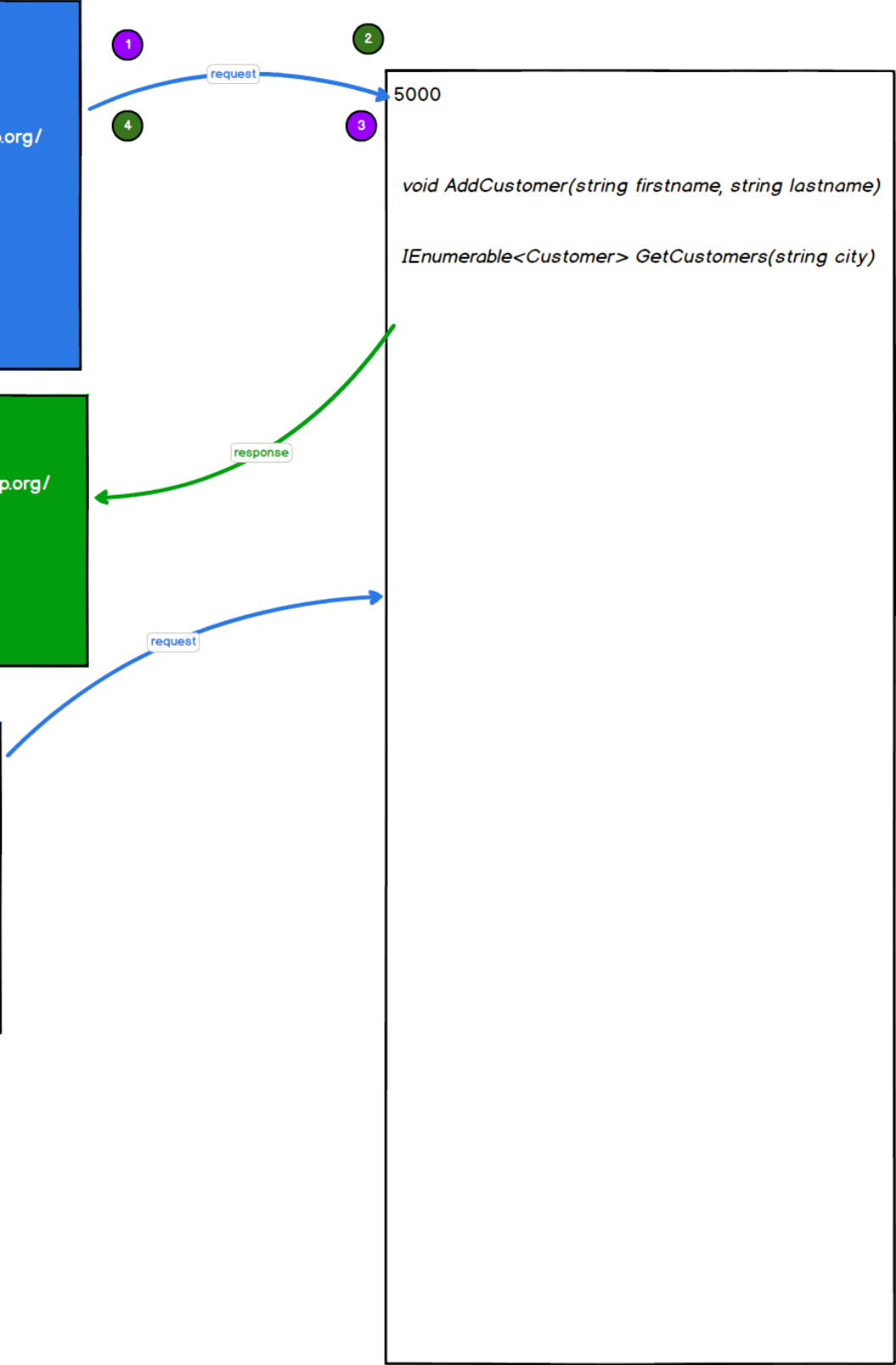
```
200 OK
Content-Type: application/xml

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope">
  <s:Header>
  </s:Header>
  <s:Body>
    <AddCustomerResponse>
    </AddCustomerResponse>
  </s:Body>
</s:Envelope>
```

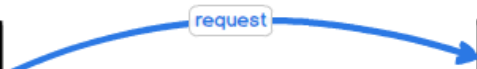
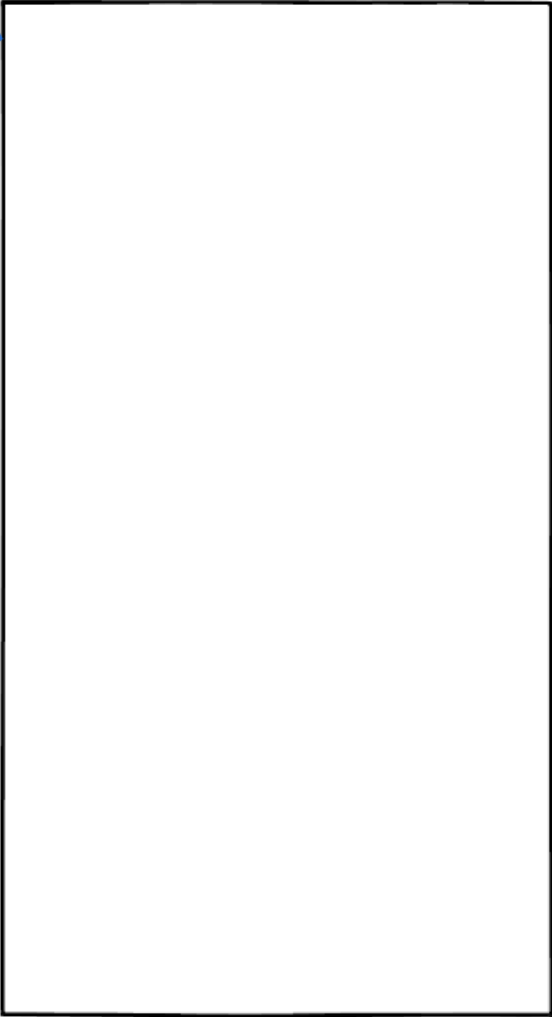
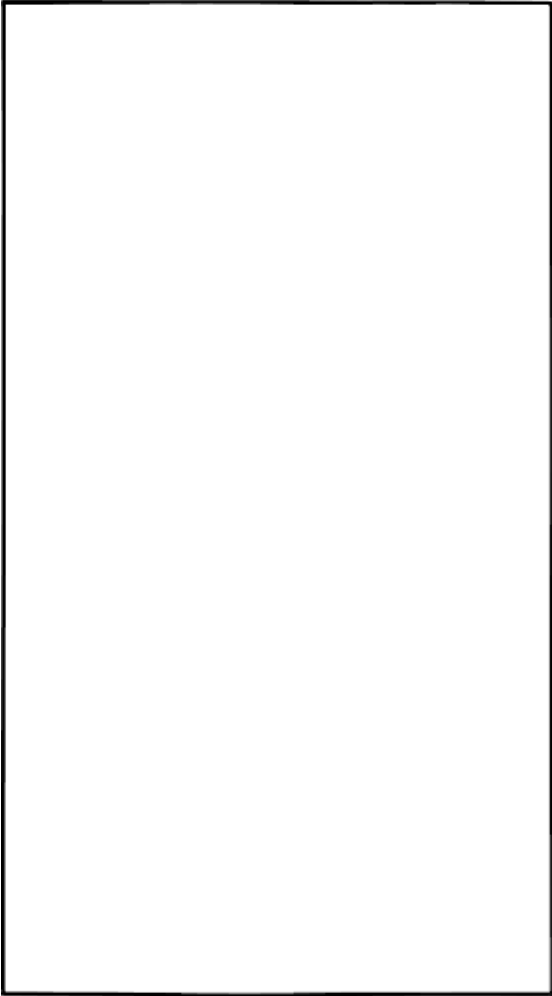
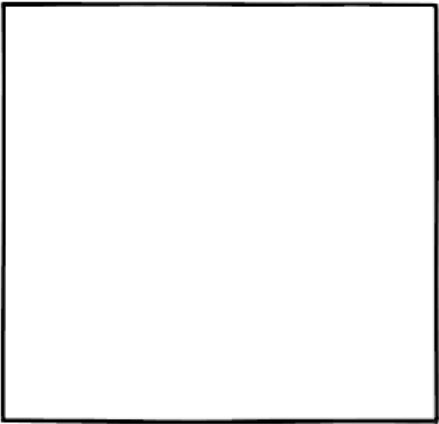
```
POST HelloService.svc HTTP/1.1
Host: localhost
Accept: application/xml
Content-Type: application/xml

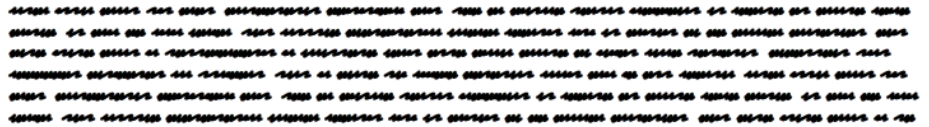
<xml>
  <GetCustomers>
    <City>Warsaw</City>
  </GetCustomers>
</xml>
```

SOAP



Contract



[illegible]

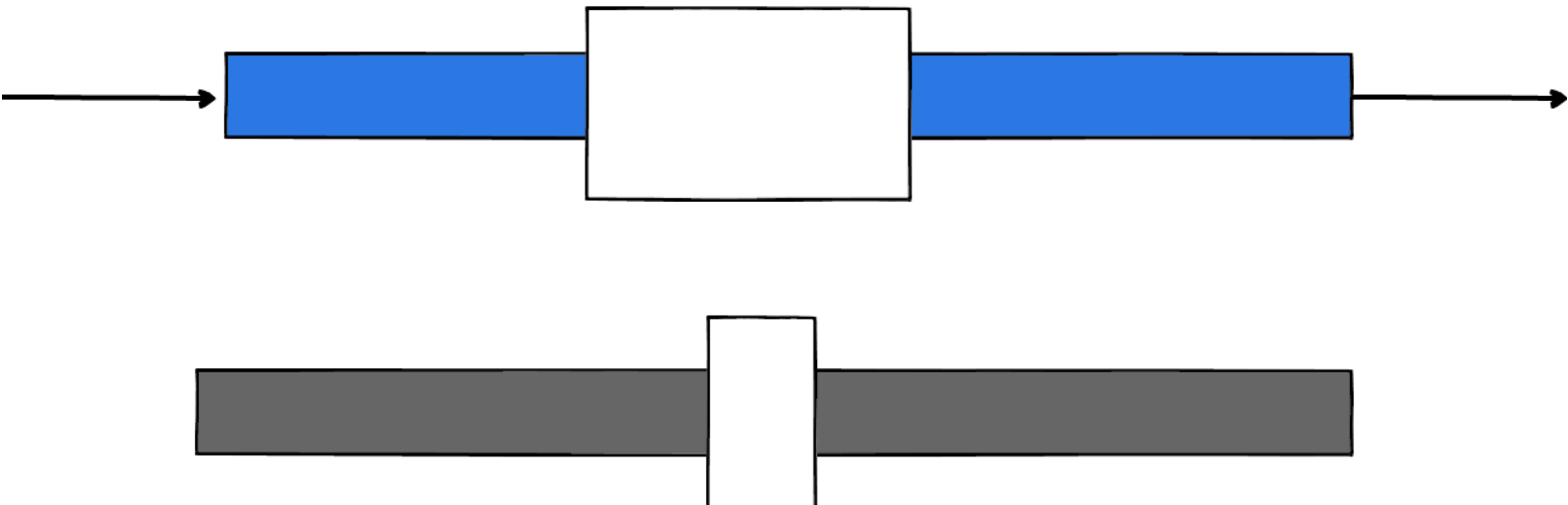
2017-2018 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024 2024-2025 2025-2026 2026-2027 2027-2028 2028-2029 2029-2030 2030-2031 2031-2032 2032-2033 2033-2034 2034-2035 2035-2036 2036-2037 2037-2038 2038-2039 2039-2040 2040-2041 2041-2042 2042-2043 2043-2044 2044-2045 2045-2046 2046-2047 2047-2048 2048-2049 2049-2050 2050-2051 2051-2052 2052-2053 2053-2054 2054-2055 2055-2056 2056-2057 2057-2058 2058-2059 2059-2060 2060-2061 2061-2062 2062-2063 2063-2064 2064-2065 2065-2066 2066-2067 2067-2068 2068-2069 2069-2070 2070-2071 2071-2072 2072-2073 2073-2074 2074-2075 2075-2076 2076-2077 2077-2078 2078-2079 2079-2080 2080-2081 2081-2082 2082-2083 2083-2084 2084-2085 2085-2086 2086-2087 2087-2088 2088-2089 2089-2090 2090-2091 2091-2092 2092-2093 2093-2094 2094-2095 2095-2096 2096-2097 2097-2098 2098-2099 2099-2100 2100-2101 2101-2102 2102-2103 2103-2104 2104-2105 2105-2106 2106-2107 2107-2108 2108-2109 2109-2110 2110-2111 2111-2112 2112-2113 2113-2114 2114-2115 2115-2116 2116-2117 2117-2118 2118-2119 2119-2120 2120-2121 2121-2122 2122-2123 2123-2124 2124-2125 2125-2126 2126-2127 2127-2128 2128-2129 2129-2130 2130-2131 2131-2132 2132-2133 2133-2134 2134-2135 2135-2136 2136-2137 2137-2138 2138-2139 2139-2140 2140-2141 2141-2142 2142-2143 2143-2144 2144-2145 2145-2146 2146-2147 2147-2148 2148-2149 2149-2150 2150-2151 2151-2152 2152-2153 2153-2154 2154-2155 2155-2156 2156-2157 2157-2158 2158-2159 2159-2160 2160-2161 2161-2162 2162-2163 2163-2164 2164-2165 2165-2166 2166-2167 2167-2168 2168-2169 2169-2170 2170-2171 2171-2172 2172-2173 2173-2174 2174-2175 2175-2176 2176-2177 2177-2178 2178-2179 2179-2180 2180-2181 2181-2182 2182-2183 2183-2184 2184-2185 2185-2186 2186-2187 2187-2188 2188-2189 2189-2190 2190-2191 2191-2192 2192-2193 2193-2194 2194-2195 2195-2196 2196-2197 2197-2198 2198-2199 2199-2200 2200-2201 2201-2202 2202-2203 2203-2204 2204-2205 2205-2206 2206-2207 2207-2208 2208-2209 2209-2210 2210-2211 2211-2212 2212-2213 2213-2214 2214-2215 2215-2216 2216-2217 2217-2218 2218-2219 2219-2220 2220-2221 2221-2222 2222-2223 2223-2224 2224-2225 2225-2226 2226-2227 2227-2228 2228-2229 2229-2230 2230-2231 2231-2232 2232-2233 2233-2234 2234-2235 2235-2236 2236-2237 2237-2238 2238-2239 2239-2240 2240-2241 2241-2242 2242-2243 2243-2244 2244-2245 2245-2246 2246-2247 2247-2248 2248-2249 2249-2250 2250-2251 2251-2252 2252-2253 2253-2254 2254-2255 2255-2256 2256-2257 2257-2258 2258-2259 2259-2260 2260-2261 2261-2262 2262-2263 2263-2264 2264-2265 2265-2266 2266-2267 2267-2268 2268-2269 2269-2270 2270-2271 2271-2272 2272-2273 2273-2274 2274-2275 2275-2276 2276-2277 2277-2278 2278-2279 2279-2280 2280-2281 2281-2282 2282-2283 2283-2284 2284-2285 2285-2286 2286-2287 2287-2288 2288-2289 2289-2290 2290-2291 2291-2292 2292-2293 2293-2294 2294-2295 2295-2296 2296-2297 2297-2298 2298-2299 2299-2300 2300-2301 2301-2302 2302-2303 2303-2304 2304-2305 2305-2306 2306-2307 2307-2308 2308-2309 2309-2310 2310-2311 2311-2312 2312-2313 2313-2314 2314-2315 2315-2316 2316-2317 2317-2318 2318-2319 2319-2320 2320-2321 2321-2322 2322-2323 2323-2324 2324-2325 2325-2326 2326-2327 2327-2328 2328-2329 2329-2330 2330-2331 2331-2332 2332-2333 2333-2334 2334-2335 2335-2336 2336-2337 2337-2338 2338-2339 2339-2340 2340-2341 2341-2342 2342-2343 2343-2344 2344-2345 2345-2346 2346-2347 2347-2348 2348-2349 2349-2350 2350-2351 2351-2352 2352-2353 2353-2354 2354-2355 2355-2356 2356-2357 2357-2358 2358-2359 2359-2360 2360-2361 2361-2362 2362-2363 2363-2364 2364-2365 2365-2366 2366-2367 2367-2368 2368-2369 2369-2370 2370-2371 2371-2372 2372-2373 2373-2374 2374-2375 2375-2376 2376-2377 2377-2378 2378-2379 2379-2380 2380-2381 2381-2382 2382-2383 2383-2384 2384-2385 2385-2386 2386-2387 2387-2388 2388-2389 2389-2390 2390-2391 2391-2392 2392-2393 2393-2394 2394-2395 2395-2396 2396-2397 2397-2398 2398-2399 2399-2400 2400-2401 2401-2402 2402-2403 2403-2404 2404-2405 2405-2406 2406-2407 2407-2408 2408-2409 2409-2410 2410-2411 2411-2412 2412-2413 2413-2414 2414-2415 2415-2416 2416-2417 2417-2418 2418-2419 2419-2420 2420-2421 2421-2422 2422-2423 2423-2424 2424-2425 2425-2426 2426-2427 2

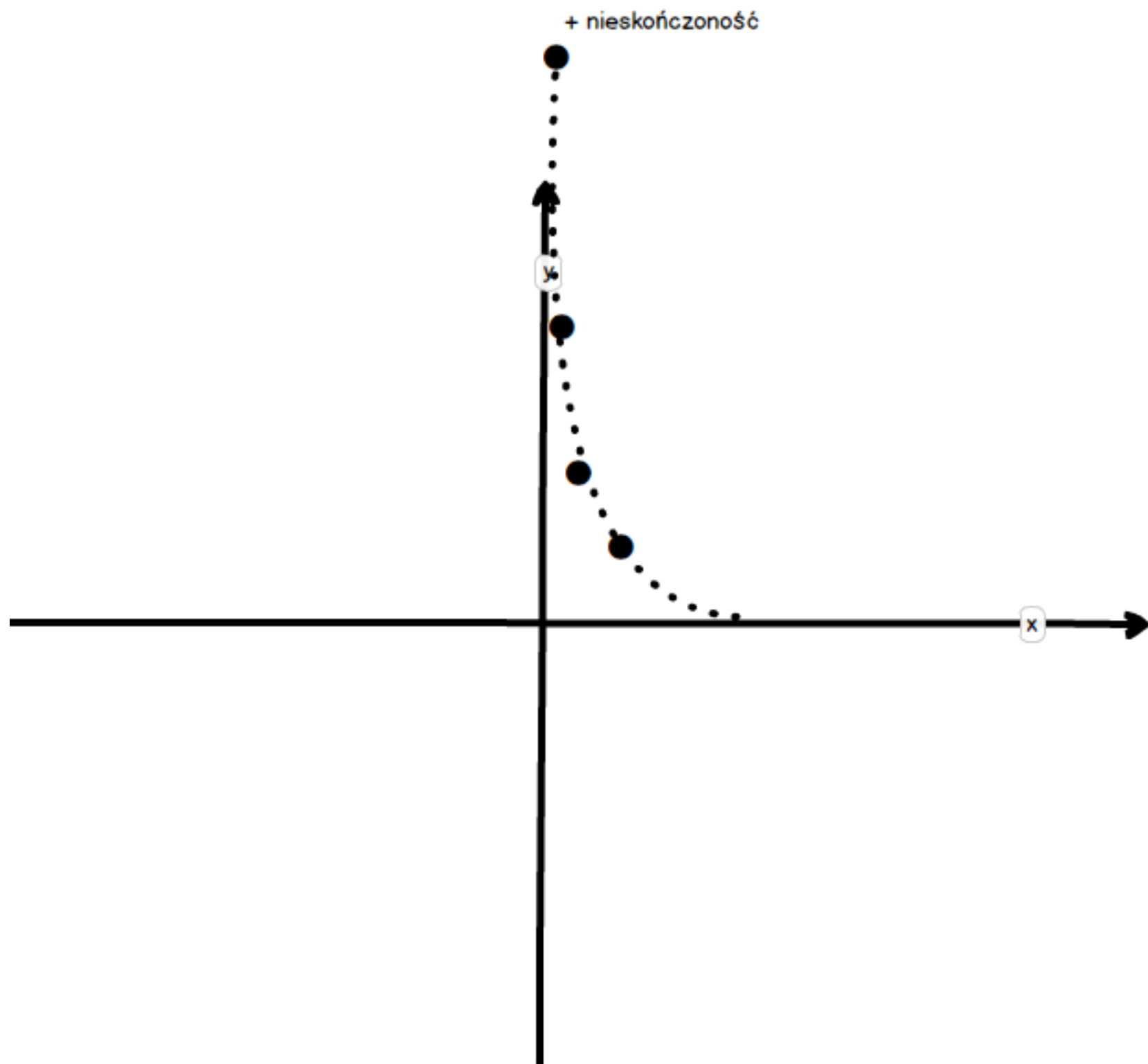
[illegible][illegible]

## Stream



## MemoryStream







```
{method} {resource} {protocol/version}
Host: {host}
Accept: {mime-type}
Accept-Language: {code}
{blank-line}
```

```
GET /customers/10 HTTP/1.1
Host: localhost
Accept: application/xml
```

```
200 OK
Content-Type: application/xml
Version: v1

<Customer>
  <FirstName>John</FirstName>
  <LastName>Smith</LastName>
</Customer>
```

```
GET /customers?City=Lódź&Street=Piotrkowska HTTP/1.1
Host: localhost
Accept: application/json
```

```
200 OK
Content-Type: application/json
Version: v1

[
  {
    "FirstName": "John",
    "LastName": "Smith",
  },
  {
    "FirstName": "Ann",
    "LastName": "Smith",
  }
]
```

```
POST /customers HTTP/1.1
Host: localhost
Content-Type: application/json

{
  "FirstName": "John",
  "LastName": "Smith",
}
```

```
PUT /customers/10 HTTP/1.1
Host: localhost
Content-Type: application/json

{
  "FirstName": "Ann",
  "LastName": "Smith",
}
```

```
DELETE /customers/10 HTTP/1.1
Host: localhost
```

## REST API

GET api/customers

GET api/customers/10

GET api/customers/933304323

GET api/customers/Lódź

GET api/customers?city=Lódź&Street=Piotrkowska

GET api/customers/10/orders

POST api/customers

PUT api/customers/10

PATCH api/customers/10

DELETE api/customers/10

OPTIONS api/customers

method resource

GET - pobierz

POST - utwórz

PUT - zamień

PATCH - zmień

DELETE - usuń

HEAD - sprawdź czy istnieje

OPTIONS - dostępne operacje

GET api/customers/10?action=remove

GET api/customers/CalculateSalary?id=10

GET api/orders?customerId=10

~~GET posts?id=32103~~

GET posts/wcf/message-constructs.html

GET posts/wcf/data-constructs.html

GET posts/wpf/mvvm/delegate-command.html

```
POST HelloService.svc HTTP/1.1
Host: localhost
Accept: application/xml
Content-Type: application/xml

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope">
  <s:Header>
  </s:Header>
  <s:Body>
    <AddCustomer>
      <FirstName>John</FirstName>
      <LastName>Smith</LastName>
    </AddCustomer>
  </s:Body>
</s:Envelope>
```

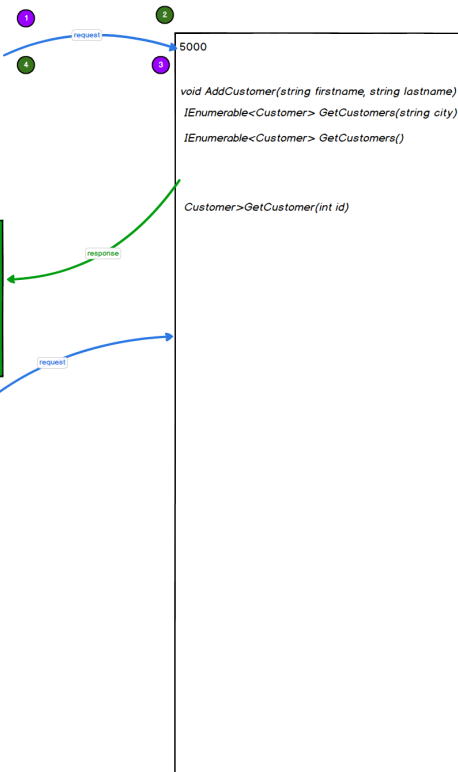
```
200 OK
Content-Type: application/xml

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope">
  <s:Header>
  </s:Header>
  <s:Body>
    <AddCustomerResponse>
    </AddCustomerResponse>
  </s:Body>
</s:Envelope>
```

```
POST HelloService.svc HTTP/1.1
Host: localhost
Accept: application/xml
Content-Type: application/xml

<xml>
  <GetCustomers>
    <City>Warsaw</City>
  </GetCustomers>
</xml>
```

SOAP



zapis funkcyjny

 $f(x) = x + 2$   $x$  należy do  $C$  $f(x,y) = x + y$   $x,y$  należy do  $C$  $g(x) = x + 2$   $x$  należy do  $C$  $h(x) = f(x) + g(x)$   $x$  należy do  $C$ 

zapis imperatywny

```
int F(int x) { return x + 2 }
```

```
int F(int x, int y) { return x + y }
```

```
int G(int x) { return x + 2 }
```

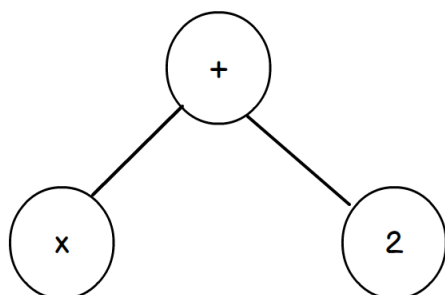
```
delegate (int x) { return x + 2 }
```

rachunek lambda

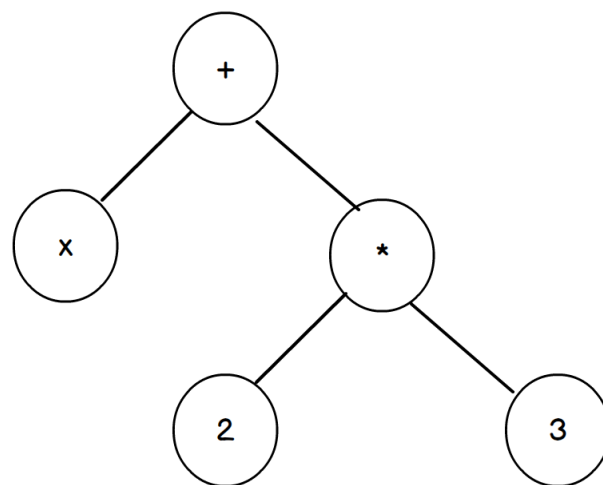
 $\lambda x \rightarrow x + 2$   $x$  należy do  $C$  $\lambda x, y \rightarrow x + y$   $x,y$  należy do  $C$ 

```
int x = 10;
```

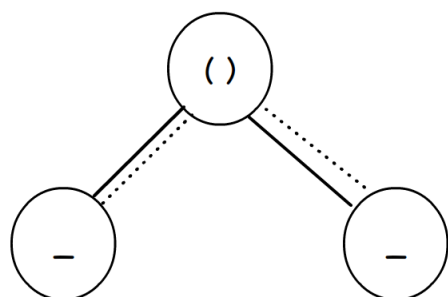
zapis deklaratywny

 $x \Rightarrow x + 2$  $x + 2$  $x + 2 * 3$ 

Expression



operator



lewy operand

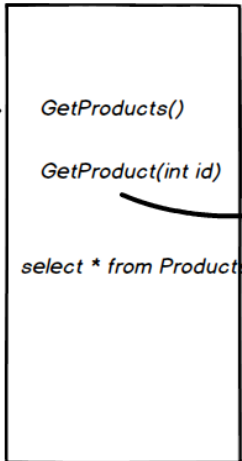
prawy operand

przykłady operatorów z jednym operandem:

 $x++$  $++x$  $!x$  $x!$



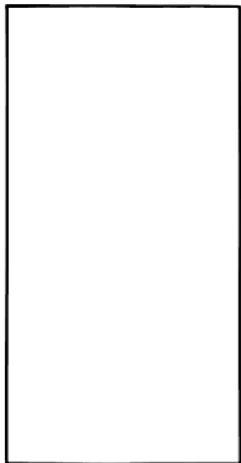
*DbProductService*



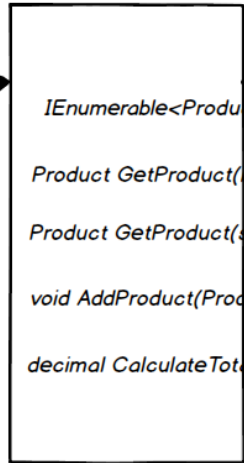
SQL Server



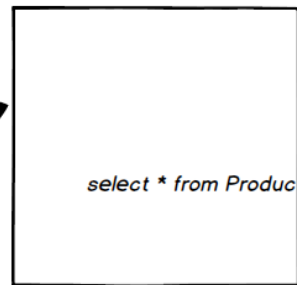
*service*



*interface IProductService*

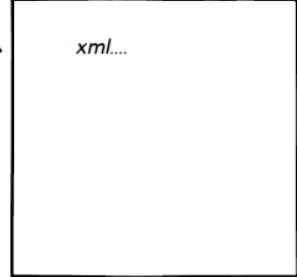


*class DbProductService*



SQL Server

*class XmlFileProductService*



products.xml

