

Evaluating The PD-Thesis Program

This is an evaluation of the program for detection of price differentiation by fmurr01¹ with the use of the personalization-testsuite²! In the following the program will be referred to as the “Program” and the personalization-testsuite will be referred to as the “Test Environment”. This Evaluation will focus on the capabilities of the program to reveal price differentiation and personalized prices! The Program was originally configured for a limited number of ecommerce websites. To enable usability the test code was altered, so that it can be used in combination with the Test Environment. The altered code can be found on “<https://github.com/johuella/pd-thesis>”.

Evaluation Setting

The Program is intended for product pages with a single product, while the Test Environment only provides a listing of programs. To simulate a single product page the Program will be tested on the first product of the listing. In this case, the links for the following Test Runs need to ensure consistency, regarding the products that are displayed as well as the website’s structure, to be able to scrape the prices for the same product! This is given as the default of the Test Environment is static for all components and therefore structure and content are identical for all three requests.

For the evaluation, the Program was run 3 different times with different settings. Prior to the start of all runs, the database of the Test Environment was reset, as well as the browser storage. For all three runs the following three URLs were used:

- 127.0.0.1/ecommerce/price=d (for dynamic prices)
- 127.0.0.1/ecommerce/price=p (for personalized prices)
- 127.0.0.1/ecommerce (for static prices)

In run 1 the Test Environment used user recognition based on sessions, cookies, and browser fingerprints. The Program was executed without any pre-scraped cookies being loaded into the browser storage.

In run 2 the Test Environment used user recognition based on session and user cookies. The Program was executed, as in run 1, without any pre-scraped cookies being loaded into the browser storage.

In run 3 the Test Environment used user recognition based on session and user cookies. Contrary to runs 1 and 2, the Program was used with pre-scraped cookies being loaded into the browser storage.

¹ <https://github.com/fmurr01/main>

² <https://github.com/johuella/personalization-testsuite>

Evaluation

Run 1 has shown that the Program can detect and scrape the prices and provide an overview which can be used to discover price differences. With this run however personalization on websites cannot be shown as the Test Environment has recognition based on a very basic fingerprint and as all accesses to the website of the Test Environment are done with the same browser settings and user agent, they all have the same browser fingerprint. This can be observed in the website log for run 1: the first user is a new user and the following users are all recognized by the browser fingerprint to be the same user as the first. Therefore, personalized prices cannot be detected in such a setting, as the users are not separated enough from each other.

In run 2, user recognition by the browser fingerprint is turned off to prevent the observation from run1. This leads to a creation of a new user in the Test Environment for every profile of the program. In this run, in the case of personalized prices one can now observe price differentiation. Identical prices between the users occur due to personalization in the Test Environment based on user segments and not individual personalization.

In run 3, with the Test Environment using recognition based on user cookies and with the Program loading cookies into the browser, price differentiation for the personalized prices is observable. Additionally, the website log of the Test Environment shows that the loading of the cookies into the browser storage works, as the user, set by the website, changes between the first time of a profile accessing the website and the following requests by the same profile, where the scraping takes place.

Overall, the three runs have shown that the Program is capable of detecting prices and price differentiation for websites that use cookies for user recognition or that provide no recognition at all. With pre-loading cookies on such websites, the Program is therefore able to detect personalized prices! However, this evaluation has shown that, while the Program works with recognition based on cookies, browser fingerprints may threaten the validity of the Program, as all used profiles share the same browser configuration.

Data from Run 1:

Detected Prices:

	Hildegard	Kai	Hannes	Daniel	Linda
/ecommerce/ struct=s&price=d	72.41 USD	46.85 USD	82.77 USD	65.73 USD	78.68 USD
/ecommerce/ struct=s&price=p	93.74 USD	93.74 USD	93.74 USD	93.74 USD	93.74 USD
/ecommerce	74.99 USD	74.99 USD	74.99 USD	74.99 USD	74.99 USD

Web Storage & Browser Configurations

	Hildegard	Kai	Hannes	Daniel	Linda
Session- Cookie	eyJfcGVybWVhZ W50ljp0cnVILCJ 1c2VyljoiMTEifQ .YTYX0Q.wHHJE YE8TwupU1xqk PgjJ9xbslc	eyJfcGVybWVhZ ZW50ljp0cnVIL CJ1c2VyljoiMT EifQ.YTYX3A.is OG4R7GiO0V WPPC9ZU3JRJ pOaQ	eyJfcGVybWVhZ ZW50ljp0cnVIL CJ1c2VyljoiMT EifQ.YTYX5g.Q KAIYQFi- kIUZ5488BEHr 8nHd40	eyJfcGVybWVhZ uZW50ljp0cnV ILCJ1c2Vyljoi MTEifQ.YTYX8 Q.VKCRLgBD5 xF8- RslirOpDLsRgO 8	eyJfcGVybWVhZ ZW50ljp0cnVIL CJ1c2VyljoiMT EifQ.YTYX_A.B 7- _IUDFIJkBiya4f 7geGUWAIbC 8
User- Cookie	11	11	11	11	11
User Agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/2010010 1 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/201001 01 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/201001 01 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/201001 01 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/201001 01 Firefox/91.0

Website log of the Test Environment:

User Recognition activated
new_user
New User
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 44, 793073), 'browser_fp': -
5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:44] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:29:45] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 45, 582485), 'browser_fp': -
5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:45] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 47, 849763), 'browser_fp': -
5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:47] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:29:47] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 - - [06/Sep/2021 15:29:48] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 8
Creating Session Entry

{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 50, 989491), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:51] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:29:51] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 53, 557761), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:53] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:29:53] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
Browser Fingerprint Elements: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0127.0.0.1de
User Recognized by Browser Fingerprint
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 56, 91703), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:56] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:29:56] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 56, 331722), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:56] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 29, 58, 570140), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:29:58] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:29:58] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 - - [06/Sep/2021 15:29:58] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 1, 782495), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:30:01] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:30:01] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 4, 483067), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:30:04] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:30:04] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
Browser Fingerprint Elements: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0127.0.0.1de
User Recognized by Browser Fingerprint
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 6, 917568), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:30:06] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:30:07] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 7, 141789), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:30:07] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 8
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 9, 435967), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}
127.0.0.1 - - [06/Sep/2021 15:30:09] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 - - [06/Sep/2021 15:30:09] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 - - [06/Sep/2021 15:30:09] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 8
Creating Session Entry

{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 12, 344095), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:12] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:12] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 14, 865676), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:14] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:14] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

User Recognition activated

Browser Fingerprint Elements: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0127.0.0.1de

User Recognized by Browser Fingerprint

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 17, 260436), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:17] "←[37mGET / HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:17] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 17, 537217), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:17] "←[37mGET / HTTP/1.1←[0m" 200 -

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 20, 39596), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:20] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:20] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

127.0.0.1 - - [06/Sep/2021 15:30:20] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 23, 175777), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:23] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:23] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 25, 575256), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:25] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:25] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

User Recognition activated

Browser Fingerprint Elements: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0127.0.0.1de

User Recognized by Browser Fingerprint

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 28, 102), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:28] "←[37mGET / HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:28] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 28, 269712), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:28] "←[37mGET / HTTP/1.1←[0m" 200 -

Current User: 11

user target group: 8

Creating Session Entry

{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 30, 480103), 'browser_fp': - 5860182604172618614, 'ip_address': '127.0.0.1'}

127.0.0.1 - - [06/Sep/2021 15:30:30] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -

127.0.0.1 - - [06/Sep/2021 15:30:30] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

127.0.0.1 - - [06/Sep/2021 15:30:30] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -

Current User: 11

user target group: 8

Creating Session Entry

```
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 33, 742471), 'browser_fp': -  
5860182604172618614, 'ip_address': '127.0.0.1'}  
127.0.0.1 - - [06/Sep/2021 15:30:33] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -  
127.0.0.1 - - [06/Sep/2021 15:30:33] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -  
Current User: 11  
user target group: 8  
Creating Session Entry  
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 6, 15, 30, 36, 241690), 'browser_fp': -  
5860182604172618614, 'ip_address': '127.0.0.1'}  
127.0.0.1 - - [06/Sep/2021 15:30:36] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -  
127.0.0.1 - - [06/Sep/2021 15:30:36] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
```

Data from Run 2

Detected Prices

	Hildegard	Kai	Hannes	Daniel	Linda
/ecommerce/ struct=s&price=d	29.14 USD	33.78 USD	40.85 USD	41.90 USD	46.71 USD
/ecommerce/ struct=s&price=p	36.74 USD	26.24 USD	36.74 USD	33.24 USD	33.24 USD
/ecommerce	34.99 USD	34.99 USD	34.99 USD	34.99 USD	34.99 USD

Web Storage and Browser Configuration

	Hildegard	Kai	Hannes	Daniel	Linda
Session-Cookie	eyJfcGVybWFuZW50ljp0cnVILCJ1c2VyljoiMTEifQ.YTcnAg.is2nsqVFjB8f3WoRMa2qrv7tWNk	eyJfcGVybWFuZW50ljp0cnVILCJ1c2VyljoiMTIifQ.YTcnDw.syNffJtYlI1JgSNJCc5uiVXisDo	eyJfcGVybWFuZW50ljp0cnVILCJ1c2VyljoiMTMifQ.YTcnHA.zeJmyhWAd_1pVlgjP7-lblhoDx8	eyJfcGVybWFuZW50ljp0cnVILCJ1c2VyljoiMTQifQ.YTcnKA.CCgIC89I5aCLbBzgmDk41MCKA9U	eyJfcGVybWFuZW50ljp0cnVILCJ1c2VyljoiMTUifQ.YTcnNg.U3UybVOEinWB8Omgh8QoihgAt_w
User-Cookie	11	12	13	14	15
User Agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0

Website Log of the Test Environment:

User Recognition activated
new_user
New User
Current User: 11
user target group: 7
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 46, 48, 49475), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:46:48] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:46:48] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 7
Creating Session Entry
{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 46, 48, 949450), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:46:48] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 7
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 46, 51, 349596), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:46:51] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:46:51] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [07/Sep/2021 10:46:51] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -

Current User: 11
user target group: 7
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 46, 55, 818013), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:46:55] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:46:55] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 7
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 46, 58, 842856), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:46:58] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:46:58] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
new_user
New User
Current User: 12
user target group: 1
Creating Session Entry
{'website_id': 6, 'user_id': 12, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 1, 604601), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:01] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:02] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 12
user target group: 1
Creating Session Entry
{'website_id': 6, 'user_id': 12, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 2, 222021), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:02] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 12
user target group: 1
Creating Session Entry
{'website_id': 4, 'user_id': '12', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 4, 586456), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:04] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:04] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [07/Sep/2021 10:47:04] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 12
user target group: 1
Creating Session Entry
{'website_id': 4, 'user_id': '12', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 8, 755854), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:08] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:08] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 12
user target group: 1
Creating Session Entry
{'website_id': 4, 'user_id': '12', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 11, 652606), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:11] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:11] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
new_user
New User
Current User: 13
user target group: 6
Creating Session Entry
{'website_id': 6, 'user_id': 13, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 14, 341693), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:14] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:14] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 13
user target group: 6
Creating Session Entry
{'website_id': 6, 'user_id': 13, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 15, 60272), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [07/Sep/2021 10:47:15] "[37mGET / HTTP/1.1←[0m" 200 -
Current User: 13
user target group: 6
Creating Session Entry
{'website_id': 4, 'user_id': '13', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 17, 408288), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:17] "[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:17] "[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [07/Sep/2021 10:47:17] "[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 13
user target group: 6
Creating Session Entry
{'website_id': 4, 'user_id': '13', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 21, 593495), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:21] "[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:21] "[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 13
user target group: 6
Creating Session Entry
{'website_id': 4, 'user_id': '13', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 24, 310769), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:24] "[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:24] "[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
new_user
New User
Current User: 14
user target group: 3
Creating Session Entry
{'website_id': 6, 'user_id': 14, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 26, 979068), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:26] "[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:27] "[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 14
user target group: 3
Creating Session Entry
{'website_id': 6, 'user_id': 14, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 27, 563002), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:27] "[37mGET / HTTP/1.1←[0m" 200 -
Current User: 14
user target group: 3
Creating Session Entry
{'website_id': 4, 'user_id': '14', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 29, 898827), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:29] "[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:29] "[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [07/Sep/2021 10:47:30] "[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 14
user target group: 3
Creating Session Entry
{'website_id': 4, 'user_id': '14', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 33, 860392), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:33] "[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:33] "[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 14
user target group: 3
Creating Session Entry
{'website_id': 4, 'user_id': '14', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 36, 582542), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:36] "[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:36] "[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
new_user
New User
Current User: 15
user target group: 5
Creating Session Entry

{'website_id': 6, 'user_id': 15, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 39, 249379), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:39] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:40] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 15
user target group: 5
Creating Session Entry
{'website_id': 6, 'user_id': 15, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 40, 193595), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:40] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 15
user target group: 5
Creating Session Entry
{'website_id': 4, 'user_id': '15', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 43, 567707), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:43] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:43] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [07/Sep/2021 10:47:43] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 15
user target group: 5
Creating Session Entry
{'website_id': 4, 'user_id': '15', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 47, 428651), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:47] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:47] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 15
user target group: 5
Creating Session Entry
{'website_id': 4, 'user_id': '15', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 7, 10, 47, 50, 81743), 'browser_fp': -3400720509059380425, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [07/Sep/2021 10:47:50] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [07/Sep/2021 10:47:50] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

Data from Run 3

Dumped Cookies:

Name	Hildegard	Kai	Hannes	Daniel	Linda
User-Cookie	14	15	11	12	13
Session	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTQifQ.YUG55Q.U4a5RuPzHfAD5_kfWOC3RHvRDQM	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG6Pg.4VNQY9PhMOHgmqZ6ZUjWWjyZR5c	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG4fg.04XPoSjYR47HZrX8oM_iTxG8Tk	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG4_A.eB9ZLSHSpO_hTjtG3bbr5gJU9As	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTMifQ.YUG5jQ.kJYne0lf8qJYgMoGvypMmySRkp8

Target Group in the Test Environment

Name	Hildegard	Kai	Hannes	Daniel	Linda
User-Cookie	14	15	11	12	13
Target Group	5	7	3	4	10

Segmentation of the Environment based on a Setting with 10 Target Groups:

- Segment 1: 1,2
- Segment 2: 3,4,5
- Segment 3: 6,7
- Segment 4: 8, 9, 10

Detected Prices

	Kai	Hannes	Daniel	Linda	Hildegard
/ecommerce/struct=s&price=d	62.19 USD	61.76 USD	97.94 USD	57.05 USD	56. 42 USD
/ecommerce/struct=s&price=p	65.55 USD	72.45 USD	65.55 USD	65.55 USD	86.25 USD
/ecommerce	69.00 USD	69.00 USD	69.00 USD	69.00 USD	69.00 USD

Web Storage and Browser Configuration

	Kai	Hannes	Daniel	Linda	Hildegard
Session-Cookie	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG9eg.Rk219oGUT-efDUUjc5UANfl6B7o	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG9hQ.EMLpVwsp0m5-y6zyB5D4a8ANnDc	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG9kQ.C63CgeY5rgcwZs0Sp6pJrlUsmQw	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG9nA.kjpeZi3qlcyr1zeqXCakYwT019o	eyJfcGVybWVhZjZ50ljp0cnVILCJ1c2VyljoiMTUifQ.YUG9qA.bmzSiOi8sirzUa4o4mXQnm0Gr2E
User-Cookie	15	11	12	13	14

User Agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
------------	--	--	--	--	--

Website Log of the test environment:

User Recognition activated

new_user

New User

Current User: 16

user target group: 2

Creating Session Entry

{'website_id': 6, 'user_id': 16, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 28, 702321), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [15/Sep/2021 11:31:28] "←[37mGET / HTTP/1.1←[0m" 200 -

127.0.0.1 -- [15/Sep/2021 11:31:29] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -

Current User: 15

user target group: 7

Creating Session Entry

{'website_id': 6, 'user_id': 15, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 29, 326660), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [15/Sep/2021 11:31:29] "←[37mGET / HTTP/1.1←[0m" 200 -

Current User: 15

user target group: 7

Creating Session Entry

{'website_id': 4, 'user_id': '15', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 31, 688289), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [15/Sep/2021 11:31:31] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -

127.0.0.1 -- [15/Sep/2021 11:31:31] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

127.0.0.1 -- [15/Sep/2021 11:31:32] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -

Current User: 15

user target group: 7

Creating Session Entry

{'website_id': 4, 'user_id': '15', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 35, 261258), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [15/Sep/2021 11:31:35] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -

127.0.0.1 -- [15/Sep/2021 11:31:35] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

Current User: 15

user target group: 7

Creating Session Entry

{'website_id': 4, 'user_id': '15', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 38, 302536), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [15/Sep/2021 11:31:38] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -

127.0.0.1 -- [15/Sep/2021 11:31:38] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -

User Recognition activated

new_user

New User

Current User: 17

user target group: 9

Creating Session Entry

{'website_id': 6, 'user_id': 17, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 40, 876854), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [15/Sep/2021 11:31:40] "←[37mGET / HTTP/1.1←[0m" 200 -

127.0.0.1 -- [15/Sep/2021 11:31:41] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -

Current User: 11

user target group: 3

Creating Session Entry

{'website_id': 6, 'user_id': 11, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 41, 312533), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}

127.0.0.1 -- [15/Sep/2021 11:31:41] "←[37mGET / HTTP/1.1←[0m" 200 -

Current User: 11
user target group: 3
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 43, 547202), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:31:43] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:31:43] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [15/Sep/2021 11:31:43] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 11
user target group: 3
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 47, 45971), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:31:47] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:31:47] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 11
user target group: 3
Creating Session Entry
{'website_id': 4, 'user_id': '11', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 49, 773745), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:31:49] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:31:49] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
new_user
New User
Current User: 18
user target group: 1
Creating Session Entry
{'website_id': 6, 'user_id': 18, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 52, 481302), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:31:52] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:31:52] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 12
user target group: 4
Creating Session Entry
{'website_id': 6, 'user_id': 12, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 52, 972260), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:31:52] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 12
user target group: 4
Creating Session Entry
{'website_id': 4, 'user_id': '12', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 55, 243922), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:31:55] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:31:55] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [15/Sep/2021 11:31:55] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 12
user target group: 4
Creating Session Entry
{'website_id': 4, 'user_id': '12', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 31, 58, 412911), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:31:58] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:31:58] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 12
user target group: 4
Creating Session Entry
{'website_id': 4, 'user_id': '12', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 0, 947730), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:01] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:01] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
new_user
New User
Current User: 19
user target group: 2
Creating Session Entry

{'website_id': 6, 'user_id': 19, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 3, 638335), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:03] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:03] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 13
user target group: 10
Creating Session Entry
{'website_id': 6, 'user_id': 13, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 4, 77361), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:04] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 13
user target group: 10
Creating Session Entry
{'website_id': 4, 'user_id': '13', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 6, 361617), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:06] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:06] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [15/Sep/2021 11:32:06] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 13
user target group: 10
Creating Session Entry
{'website_id': 4, 'user_id': '13', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 9, 465501), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:09] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:09] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 13
user target group: 10
Creating Session Entry
{'website_id': 4, 'user_id': '13', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 12, 92536), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:12] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:12] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
User Recognition activated
new_user
New User
Current User: 20
user target group: 5
Creating Session Entry
{'website_id': 6, 'user_id': 20, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 15, 129693), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:15] "←[37mGET / HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:15] "←[33mGET /favicon.ico HTTP/1.1←[0m" 404 -
Current User: 14
user target group: 4
Creating Session Entry
{'website_id': 6, 'user_id': 14, 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 15, 503089), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:15] "←[37mGET / HTTP/1.1←[0m" 200 -
Current User: 14
user target group: 4
Creating Session Entry
{'website_id': 4, 'user_id': '14', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 17, 743905), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:17] "←[37mGET /ecommerce/struct=s&price=d HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:17] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
127.0.0.1 -- [15/Sep/2021 11:32:17] "←[37mGET /static/css/e_commerce.css HTTP/1.1←[0m" 200 -
Current User: 14
user target group: 4
Creating Session Entry
{'website_id': 4, 'user_id': '14', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 21, 440068), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}
127.0.0.1 -- [15/Sep/2021 11:32:21] "←[37mGET /ecommerce/struct=s&price=p HTTP/1.1←[0m" 200 -
127.0.0.1 -- [15/Sep/2021 11:32:21] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
Current User: 14
user target group: 4
Creating Session Entry

```
{'website_id': 4, 'user_id': '14', 'language': 'de', 'device': 'Other', 'location': None, 'timestamp': datetime.datetime(2021, 9, 15, 11, 32, 24, 146358), 'browser_fp': -7317345461612159276, 'ip_address': '127.0.0.1'}  
127.0.0.1 - - [15/Sep/2021 11:32:24] "←[37mGET /ecommerce HTTP/1.1←[0m" 200 -  
127.0.0.1 - - [15/Sep/2021 11:32:24] "←[33mGET /static/css/base2.css HTTP/1.1←[0m" 404 -
```