



[[doc-title]]

[[doc-subtitle]]

[[doc-type]]

[[doc-company]] [[doc-company-url]]

Document Number: [[doc-id]] Version: [[doc-version]]

Release Date: [[release-date]]



Document History

Author Name: [[doc-author]]
Author Contact: [[doc-author-email]]

Document Revision

Release Date	Status	Change Description	Author
[[doc-release-date]]	Draft	[[change-description]]	[[doc-author-name]]

Intellectual Property Rights

This document is exclusive property of [[doc-company]] and all rights are reserved.



Table of Contents Introduction 5 References 5 Markdown2-3 7 Formatted Text Examples 7 Font buttons: 7 Text Format: 7 Text Justification: 7 Useful markdown links: 7 I just have to store some code here, if you don't mind 8 I'll put it here 8 And also here 8 You know the process... 8 Markdown1 8 PUZZLES CLOUD MARKDOWN FILE HEADING 1 8 Welcome to the puzzles cloud md file HEADING 2 Let's start with stupid jokes HEADING 3 8 Let me tell you stupid joke on German: HEADING4 Let's switch to the Czech language HEADING 4 8 Real Czech language HEADING 5 Longest Serbian word he he HEADING 1 Serbian literature HEADING 2 8 It's enough, lets start with some smart things HEADING 1 8 Markdown3 9 Edge Service 9 TODO 9 TODO version 1.0 9 TODO version 1.0-next 9 Test environment and credentials 9 Edge Service Registry 10 Edge Service Relay Edge Service Client 10 ReST API 10 Login 10 Login request 10 Login response 10 Cookies 10 Logout 10 Logout request Logout response 11 Voucher list 11 Voucher list request 11 Voucher list response 11 Voucher detail 11 Voucher detail request 11 Voucher detail response 11



voucher order 11
Voucher order request 11
Voucher order response 12
Voucher order detail 12
Voucher order detail request 12
Voucher order detail response 12
Provider Text 12
Provider Text request 12
Provider Text response 12
Content 12
Content request 12
Content response 12
Verification 12
Verification request by phone number 13
Verification by phone number response 13
Verification request by sms 13
Verification by sms number response 13
Cookies 13
Cookies request 13
Cookies response 13
Documentation 13
Documentation request 13
Documentation response 13
i18 internationalization 13
i18 request 13
SameHeadingsTest 13
Heading 2 13
Heading 2 (text1) 13
Heading 2 (text2) 13
Heading 1 13
Heading 2 13
Heading 3 13
test2344123 14
Milance teeeeeest 14

Table of Tables

Table 1: Document references 5



1 Introduction

1.1 References

Referenced documents in creation of this document are listed in the Table 1.

Document Reference	Document Title	Version	Filename
[1]	[[reference-doc-title]]		[[reference-doc-filename]]
[2]			
[3]			
[4]			
[5]			
[6]			
[7]			
[8]			

Table 1: Document references





2 testing folder

2.1 Markdown2-3

2.1.1 Formatted Text Examples

Below is an illustration of the Format toolbar used to format text:

Here are some examples of the effects different options have on text:

2.1.1.1 *Font buttons:*

As well as the standard Font drop down box showing a list of all the fonts on your system and the **Point** size box that allows you to set the font size, two shortcut buttons have been added that allow you to increase the selected text or group of text objects at the press of a button:

a Will increase the font size by 2 points every time you press the button.

a Will decrease the font size by 2 points every time you press the button.

2.1.1.2 *Text Format:*

The standard text format options are also available for text i.e. bold, italic, underline and outline:



Note: You can combine any of these formats together, as in the last example above which is a combination of the bold, underline and outline formats.

2.1.1.3 Text Justification:

- # Text can be aligned to the
 - 1. left,
 - 2. *right*,
 - 3. centre
- # or one of the three full justifications: Full Justification, Density Justification and Aspect Justification.

Note: The Full justification spreads the words across the page but does not change the size of them. The Density Justification also spreads the words and does not change their size but puts spaces between the characters in a word. The Aspect Justification spreads the words but stretches the words to fill the space as well.

The Density and Aspect methods can provide some visually interesting effects.

2.1.2 Useful markdown links: # Link 1 1. This is link 1 # Link 2 1. This is link 2 # Link 3 1. This is link 3 # Link 4

This is link 4 ordered under link 3



I just have to store some code here, if you don't mind 2.1.2.1

2.1.2.1.1 I'll put it here

LoGiC iS rEaL !!!

 $\inf(a == 0) \{ a = 0; \}$

2.1.2.1.2 And also here

It's getting better

if (false == true) { // log some message }

2.1.2.1.3 You know the process...

I'll just assert and finish this...

|public void justAssert(){ | boolean checkTrue = true; | Assert.assertTrue(checkTrue); | //let me return true he he | public boolean trueStatement()| { return true; }

Markdown1 2.2

2.2.1 PUZZLES CLOUD MARKDOWN FILE HEADING 1

Welcome to the puzzles cloud md file HEADING 2 2.2.1.1

Let's start with stupid jokes HEADING 3 2.2.1.1.1

Let me tell you stupid joke on German: HEADING4 2.2.1.1.1.1

"Hey Philipp, wie war denn der Urlaub?"

"Gräßlich! Im Hotel hatte ich Zimmernummer hundert. Und vom Türschild ist die Eins abgefallen!"

ÜÜÜÜÜÜÜ- that was stupid

Let's switch to the Czech language HEADING 4

"Co r##óobi trak##óto##r u f##ry###zjera?"

War##kocze.

#####ó###!!!!

Just kidding, that was Poland language u fool, let's switch to the Czech for real

2.2.1.1.1.2.1 Real Czech language HEADING 5

ýžá##é#í#ó#**š**#ú#

- Jak #íkáte albínskému muži z Prahy?
- # Prázdný #ech.
- Longest Serbian word he he HEADING 1

2.2.2.1 Serbian literature HEADING 2

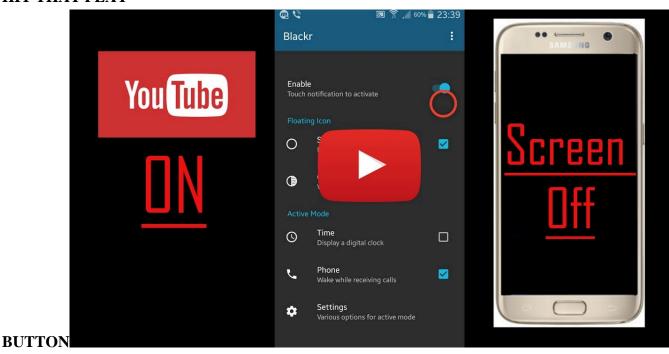
2.2.3 It's enough, lets start with some smart things HEADING 1

1.

PLAY THIS VIDEO AND THANKS ME LATER!



HIT THAT PLAY



Yep, it's a picture, fool... lol Here you go, CLICK IT:

- 2.3 testing folder
- 2.3.1 testing subFolder
- 2.3.1.1 *Markdown3*
- 2.3.1.1.1 Edge Service

The Edge Service provides the interface between the public REST API and internal AMQP API.

- 2.3.1.1.1.1 TODO
- 2.3.1.1.1.1 TODO version 1.0
 - # [x] Test environment and credentials
 - # [x] specify voucher content fields
 - # [x] specify voucher pricing fields
 - # [x] specify payment method fields
- 2.3.1.1.1.1.2 TODO version 1.0-next
 - # [] refactor entities and apply relationships
 - # [] provide full resource schemas
 - # [] enforce validation of resource schemas
- 2.3.1.1.1.2 Test environment and credentials TODO

UsernamePasswordDescriptiontest@test.orgtestjust protectedtest@gmail.comtestjust testingtesttesttestqa



2.3.1.1.1.3 Edge Service Registry

The Edge Service Registry is responsible to maintain an index of all currently available Edge Services and configure all its known [Load-Balancers] accordingly.

As of writing no hosting solution has been chosen yet. Therefor the actual API which is used to configure the load-balancers remains unspecified for now.

All Edge Service Instances **must** register themselves on the registry on startup and unregister on shutdown.

2.3.1.1.1.4 Edge Service Relay

Every Edge Service will be provided with a local relay connecting its instances to the central Message Broker cluster. The message exchange routing of the relay is configured in such a way, that only messages relevant to its connected Edge Services is routed to it from the broker cluster.

See [Message Relay] for more information.

2.3.1.1.1.5 Edge Service Client

Each Service that is to be served by the Edge Service is represented by a so-called Edge Service Client. It is responsible to provide the implementation of the public REST API for that given service.

2.3.1.1.1.6 ReST API

The Edge Service API acts as translation layer between the Services and the Frontend. The actual logic is implemented in separate [Edge Service Client]s for each individual Service consumed by the API or API endpoint provided by the API, respectively.

All public-facing endpoints **must** adhere to the [JSONAPI] specification and be subject to strict [Access Control].

2.3.1.1.1.6.1 Login

2.3.1.1.6.1.1 Login request

2.3.1.1.1.0.1.1	Login reques	ι					
Variables		Descrip	Description		Example		
ICP_SHOP_ID		see [Te	st environmer tials]	at and			
ICP_SHOP_PASSPHRASE			see [Test environment and credentials]				
ICP_SHOP_DIG		Derived from \${ICP_SHOP_ID} and MzAwMDAwMTY6dG \${ICP_SHOP_PASSPHRASE}			G9wLXNIY3JI	dC1wYXNzcGhyYXNl	
POST /api/rest/v1/auth/login HTTP/1.1 Authorization: Basic \${ICP_SHOP_DIGEST} Accept: application/vnd.api+json							
2.3.1.1.1.6.1.2 Login response							
HTTP/1.1 201 Created Content-Type: application/vnd.api+json							
2.3.1.1.1.6.1.3	Cookies						
Name	Value	Domain	Path	Expires	HttpOnly	Secure	

false

2.3.1.1.1.6.2 Logout

SESSION

2.3.1.1.1.6.2.1 Logout request

Variables Description Example

MmQ5ZjkxOGItMff**asted**;e00Nqqfl0fl00jf1MdcksYmUw**S**jYassi6zJiZDY5 true



order-success-

redirect-url

string

POST /api/rest/v1/auth/logout HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json 23111622 Logout response HTTP/1.1 204 No Content 2.3.1.1.1.6.3 *Voucher list* See [VoucherWebList] method in the [Mimas integration] documentation for the source of these fields. 2.3.1.1.1.6.3.1 Voucher list request GET /api/rest/v1/vouchers HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json 2.3.1.1.1.6.3.2 Voucher list response 2.3.1.1.1.6.4 *Voucher detail* Voucher detail request 2.3.1.1.1.6.4.1 GET /api/rest/v1/vouchers/:voucher-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json 2.3.1.1.1.6.4.2 Voucher detail response HTTP/1.1 200 OK Content-Type: application/vnd.api+json { "idd:"f634f09f-9a06-4297-a326-0d703938b702", "type":"voucher", "attributes":{ "code":"LEBALLINNL10", "currency":"EUR", "ean-code":"8717472242211", "encryption-type":0, "kind":0, "name":"Lebara All-in NL 10 EUR", "provider-code":"LEBARA", "provider-name":"Lebara", "short-name":"All-in NL 10", "value":10.0, "price-total":11.99, "price-tax":0.00, "price-fee":1.99, "payment-methods": { "wirecard-creditcard":{ "name":"Credit Card", "provider-name":"Wirecard", "image-url":"https://wirecard.com/logo.png" }, "wirecard-paypal":{ "name":"PayPal", "provider-name":"Wirecard" } } } } } } } 2.3.1.1.1.6.5 Voucher order See [VoucherWebReserve] method in the [Mimas integration] documentation for the source of these fields. 2.3.1.1.1.6.5.1 Voucher order request | Variables | Description | Example | | ------POST /api/rest/v1/voucher-orders HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "voucher-code": "VODADE15" "payment-method": "Wirecard VISA", "notification-type": "email", "notification-target": "me@my-email.com", "provider-text-url": "https://provider.texts", "order-success-redirect-url": "/success", "order-failed-redirect-url": "failed", "order-canceled-redirect-url": "/cancel" } } } field name constrains description example type id UUID globally unique globally unique c91feaf3-5968-4b60-**UUID** aa5b-62fe7fdd905c string n/a type type of request, must be "voucher-order", "voucher-order" code of the voucher "VODADE15" voucher-code string n/a gathered from voucher list payment-method on of the allowed "Wirecard VISA" string methods for the voucher, denoted in voucher list response notification-type string currently only type of the "email" "email" is supported notification target "[me@mynotification-target string n/a target adress email.com] (mailto:me@myemail.com)"

valid URL

Where the wirecard

should redirect

protect



field name type constrains description example if payment was successfull order-failed-redirect- string valid URL Where the wirecard protect should redirect if nrl payment fails order-canceledvalid URL Where the wirecard string protect should redirect redirect-url if payment was canceled 2.3.1.1.1.6.5.2 Voucher order response "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "notification-status": "pending", "confirmation-status": "pending", "notification-type": "email", "notification-target": "me@my-email.com", "payment-provider": "wirecard", "payment-redirect-url": "https://wpp-test.wirecard.com/?wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFillM", "payment-session-id": "4b7c0aec-3db3-4cd2-9b22-4d41fb964fdc", "payment-status": "pending", "payment-method": "creditcard", "voucher-code": "LEBALLINNL10", "voucher-currency": "EUR", "voucher-value": 10.0 "voucher-status": "pending", "order-price-total": 11.99, "order-tax-total": 0.00, "order-fee-total": 0.99, "order-status": "pending", "serial-number": "1234", "confirmation-date": "0", "batch-number": "1234" } } } 2.3.1.1.1.6.6 Voucher order detail 2.3.1.1.1.6.6.1 Voucher order detail request GET /api/rest/v1/voucher-orders/:order-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json 2.3.1.1.1.6.6.2 Voucher order detail response | "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", "type": "voucher-order", "attributes": { "notification-status": "pending", "confirmation-status": "pending", "notification-type": "email", "notification-target": "me@my-email.com", "payment-provider": "wirecard", "payment-redirect-url": "https://wpp-test.wirecard.com/?wPaymentToken=y93bki675x2CdKP8-h0mLD2zDgf26ptjxSNRiKFiIIM", "payment-session-id": "4b7c0aec-3db3-4cd2-bb22-4d41fb964fdc", "payment-status": "pending", "payment-emethod": "creditcard", "voucher-code": "LEBALLINNL10", "voucher-currency": "EUR", "voucher-value": 10.0 "voucher-status": "pending", "order-price-total": 11.99, "order-tax-total": 0.00, "order-fee-total": 1.99, "order-status": "pending", "serial-number": "1234", "confirmation-date": "1611313953175" } } } HTTP/1.1 200 OK Content-Type: application/vnd.api+json { "data": { "id": "c91feaf3-5968-4b60-aa5b-62fe7fdd905c", status": "pending", "confirmation-status": "pending", "notificat 2.3.1.1.1.6.7 Provider Text See [GetProvicerTexts] method in the [Mimas integration] documentation for the source of these fields. 2.3.1.1.1.6.7.1 Provider Text request **Variables Description** Example GET /api/rest/v1/provider-texts/ HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json GET /api/rest/v1/provider-texts/:provider-id HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json 2.3.1.1.1.6.7.2 Provider Text response HTTP/1.1 201 Created Content-Type: application/vnd.api+json { "data": [{ "id": "f74bb480-d6df-47ad-8a17-8d7b1b176661", "type": "voucher-text", "attributes": { "provider-code": "ABOUTYOU", "kind": "title", "title": "Produktname", "body": "About You-Geschenkkarte" } }, { "id": "a598bf3b-abe0-4fc4-80fa-135a84510c81", "type": "voucher-text", "attributes": { "provider-code": "ABOUTYOU", "kind": "subtitle", "title": "Slogan", "body": "Hol Dir per E-Mail eine About You-Geschenkkarte." } }] } 2.3.1.1.1.6.8 Content See [Content Service] for more information on the source of these fields. 2.3.1.1.1.6.8.1 Content request **Variables Description Example** GET /api/rest/v1/content/i18next.json HTTP/1.1 Authorization: No Auth Accept: application/json 2.3.1.1.1.6.8.2 Content response HTTP/1.1 200 OK Content-Type: application/json { "en": { "world.hello": "Hello, World!", "example.text": "Lorem ipsum dolor sit amet...", "button.cancel": "Cancel", "radio.options": { "option-1": "Selection 1", "option-2": "Selection 2", } }, "de": { "world.hello": "Hallo, Welt!", "example.text": "Lorem ipsum dolor sit amet...", "button.cancel": "Abbrechen" "radio.options": { "option-1": "Auswahl 1", "option-2": "Auswahl 2", } } 2.3.1.1.1.6.9 Verification

See for more information on the source of these fields.



```
2.3.1.1.1.6.9.1
                          Verification request by phone number
POST /api/rest/v1//auth/phone-number-verification HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": { "id": "38f4dfef-9baa-4302-83lf-e41df4ce4084", "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "sms-confirmation-code": "716569" } } }
2.3.1.1.1.6.9.2
                          Verification by phone number response
HTTP/1.1 200 OK Content-Type: application/json { "data": { "type": "phone-number-verification", "attributes": { "phone-number": "+381691994655", "ok": false, "remaining-number-of-attempts": 4, "remaining-expiration-time": 0 } } }
2.3.1.1.1.6.9.3
                         Verification request by sms
POST / api/rest/v1/auth/sms-verification-code \ \ HTTP/1.1 \ \ Authorization: \ No \ \ Auth \ \ Accept: application/vnd.api+json \ \{ \ "data": \{ "48f4dfef-9baa-4302-831f-e41df4ce4084", "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655" } \} \}
                          Verification by sms number response
|HTTP/1.1 200 OK Content-Type: application/vnd.api+json
{ "data": { "type": "sms-verification-code", "attributes": { "phone-number": "+381691994655", "ok": true, "remaining-number-of-attempts": 2, "remaining-delay-time": 20, "remaining-expiration-time": 1800 } }
2.3.1.1.1.6.10Cookies
2.3.1.1.6.10.1 Cookies request
POST/api/rest/v1/cookies HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json { "data": [ { "type": "cookie", "id": "shopId", "attributes": { "name": "shopId", "value": "l234" } }, { "type": "cookie", "id": "ns_dev_id", "attributes": { "name": "ns_dev_id", "value": "device_id" } } ] }
2.3.1.1.1.6.10.2
                         Cookies response
HTTP/1.1 200 OK
2.3.1.1.1.6.11Documentation
Returns list of Json Schemas for request and response for requested rest endpoint. Use exact
endpoint plus schema url parameter. For example, /api/rest/v1/vouchers?schema will return
ison schemas for /api/rest/v1/vouchers endpoint.
2.3.1.1.6.11.1 Documentation request
GET /api/rest/v1/vouchers?schema HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
2.3.1.1.6.11.2 Documentation response
Complete Response is omitted because of size, here is just a part:
[TITE | 1.1 200 OK]

[ "required": [ "createdDate", "notificationStatus", "notificationTarget", "notificationType", "orderFeeTotal", "orderPriceTotal", "orderStatus", "orderTaxTotal", "paymentMethod", "paymentProvider", "paymentStatus", "shortId", "voucherCode", "voucherCurrency", "voucherStatus", "voucherValue" ] }
HTTP/1.1 200 OK
2.3.1.1.1.6.12i18 internationalization
            Retrieves i18next json based on requested language
2.3.1.1.1.6.12.1 i18 request
GET api/rest/v1/content/i18next.json/de HTTP/1.1 Authorization: No Auth Accept: application/vnd.api+json
2.3.1.2
               no files folder
2.3.1.3
               SameHeadingsTest
2.3.1.3.1
                  Heading 2
                  Heading 2 (text1)
2.3.1.3.2
2.3.1.3.3
                  Heading 2 (text2)
2.3.2
             Heading 1
2.3.2.1
               Heading 2
2.3.2.1.1
                  Heading 3
```



3 test2344123

3.1 Milance teeeeeest

People

just to check-:fire:

:bowtie: :bowtie: :smile: :smile: :laughing: :laughing: :laughing: :blush: :blush: :smiley: :smiley: :relaxed: :relaxed:

:smirk: :smirk: :heart_eyes: :heart_eyes: :kissing_heart: :kissing_heart:

:kissing_closed_eyes: :flushed: :flushed: :relieved: :relieved:

:kissing_closed_eyes:

:satisfied: :satisfied: :grin: :grin: :wink: :wink:

:stuck_out_tongue_winking_eye: :stuck_out_tongue_closed_eyes: :grinning: :grinning: :grinning: :stuck_out_tongue_winking_eye: :stuck_out_tongue_closed_eyes:

:kissing: :kissing: :stuck_out_tongue: :stuck_out_tongue:

:kissing_smiling_eyes:

:sleeping: :sleeping: :worried: :worried: :frowning: :frowning: :anguished: :anguished: :open_mouth: :open_mouth: :grimacing: :grimacing:

:confused: :confused: :hushed: :expressionless: :expressionless:

:unamused: :sweat_smile: :sweat_smile: :sweat: :sweat: :disappointed_relieved: :weary: :weary: :pensive: :pensive:

:disappointed_relieved:

:disappointed: :disappointed: :confounded: :confounded: :fearful: :fearful:

:cold_sweat: :cold_sweat: :persevere: :persevere: :cry: :cry:

:sob: :sob: :joy: :joy: :astonished: :astonished:

 :scream: :scream:
 :neckbeard: :neckbeard:
 :tired_face: :tired_face:

 :angry: :angry:
 :rage: :rage:
 :triumph: :triumph:

:sleepy: :sleepy: :yum: :yum: :mask: :mask: :sunglasses: :sunglasses: :dizzy_face: :dizzy_face: :imp: :imp:

:smiling_imp: :smiling_imp: :neutral_face: :neutral_face: :no_mouth: :no_mouth:

:innocent: :innocent: :alien: :alien: :yellow_heart: :yellow_heart:

:blue_heart: :blue_heart: :purple_heart: :purple_heart: :heart: :heart:

:green heart: :green heart: :broken heart: :heartbeat: :heartbeat:

:heartpulse: :heartpulse: :two_hearts: :two_hearts: :revolving_hearts: :revolving_hearts:

:cupid: :cupid: :sparkling_heart: :sparkling_heart: :sparkles: :sparkles:

:star: :star: :star2: :dizzy: :dizzy: :boom: :boom: :collision: :collision: :anger: :anger:

 $: exclamation: : exclamation: : question: : question: : grey_exclamation: : grey_exc$

:grey_question: :grey_question: :zzz: :zzz: :dash: :dash:

:sweat_drops: :sweat_drops: :notes: :notes: :musical_note: :musical_note:

:fire: :fire: :hankey: :hankey: :poop: :poop:

:shit: :shit: :+1: :thumbsup: :thumbsup:



:two_men_holding_hands:

:haircut: :haircut:

:scream_cat: :scream_cat:

:bowtie: :bowtie: :smile: :smile: :laughing: :laughing:

:-1: :-1: :thumbsdown: :thumbsdown: :ok_hand: :ok_hand:

:punch: :punch: :facepunch: :facepunch: :fist: :fist: :hand: :hand: :v: :v: :wave: :wave:

:raised_hand: :raised_hand: :open_hands: :open_hands: :point_up: :point_up:

:point_down: :point_down: :point_left: :point_left: :point_right: :point_right: :raised_hands: :raised_hands: :point_up_2: :point_up_2: :pray: :pray:

:clap: :clap: :muscle: :muscle: :metal: :metal: :fu: :fu: :walking: :walking: :runner: :runner: :running: :running: :couple: :couple: :family: :family: :two_men_holding_hands: :two_women_holding_hands: :dancer: :dancer:

:dancers: :dancers: :ok_woman: :ok_woman: :no_good: :no_good:

:two_women_holding_hands:

:information_desk_person: :raising_hand: :raising_hand: :bride_with_veil: :bride_with_veil: :information_desk_person:

:person_with_pouting_face: :person_frowning: :person_frowning: :bow: :bow: :person_with_pouting_face:

:couplekiss: :couplekiss: :couple_with_heart: :massage: :massage:

:nail_care: :nail_care:

:couple_with_heart:

:boy: :boy: :girl: :girl: :woman: :woman: :man: :man:

:baby: :baby: :older_woman: :older_woman: :older_man: :older_man:

:person_with_blond_hair: :man_with_turban: :man_with_gua_pi_mao: :person_with_blond_hair: :man_with_gua_pi_mao: :man_with_turban:

:construction worker: :angel: :angel: :cop: :cop: :construction_worker:

:princess: :princess: :smiley_cat: :smiley_cat: :smile_cat: :smile_cat: :kissing_cat: :kissing_cat: :smirk_cat: :smirk_cat: :heart_eyes_cat: :heart_eyes_cat:

:japanese_goblin: :japanese_goblin: :pouting_cat: :pouting_cat: :japanese_ogre: :japanese_ogre: :see_no_evil: :see_no_evil: :hear_no_evil: :hear_no_evil: :speak_no_evil: :speak_no_evil:

:crying_cat_face: :crying_cat_face:

:joy_cat: :joy_cat:

:guardsman: :guardsman: :skull: :skull: :feet: :feet:

:lips: :lips: :kiss: :kiss: :droplet: :droplet: :ear: :ear: :eyes: :eyes: :nose: :nose:

:bust_in_silhouette: :tongue: :tongue: :love_letter: :love_letter:

:bust in silhouette:

:busts_in_silhouette: :speech_balloon: :speech_balloon: :thought_balloon: :thought_balloon: :busts_in_silhouette:

:feelsgood: :feelsgood: :finnadie: :finnadie: :goberserk: :goberserk:

:godmode: :godmode: :hurtrealbad: :hurtrealbad: :rage1: :rage1: :rage3: :rage3: :rage4: :rage4: :rage2: :rage2:



:bowtie: :bowtie: :smile: :smile: :laughing: :laughing:

:suspect: :suspect: :trollface: :trollface:

Nature

:sunny: :sunny: :umbrella: :umbrella: :cloud: :cloud:

:snowflake: :snowflake: :snowman: :snowman: :zap: :zap:

:cyclone: :cyclone: :foggy: :foggy: :ocean: :ocean:

:cat: :cat: :dog: :dog: :mouse: :mouse:

:hamster: :hamster: :rabbit: :rabbit: :wolf: :wolf: : :frog: :frog: :tiger: :tiger: :koala: :koala: :koala:

:bear: :bear: :pig::pig: :pig_nose: :pig_nose:

:cow: :cow: :boar: :boar: :monkey_face: :monkey_face:

 :monkey: :monkey:
 :horse: :horse:
 :racehorse: :racehorse:

 :camel: :camel:
 :sheep: :sheep:
 :elephant: :elephant:

:panda_face: :panda_face: :snake: :snake: :bird: :bird:

:baby_chick: :baby_chick: :hatched_chick: :hatching_chick: :hatching_chick:

:chicken: :chicken: :penguin: :penguin: :turtle: :turtle: :bug: :bug: :honeybee: :honeybee: :ant: :ant:

:beetle: :beetle::snail: :snail::octopus: :octopus::tropical_fish: :tropical_fish::fish: :fish::whale: :whale::whale2: :whale2::dolphin: :dolphin::cow2: :cow2:

:ram: :ram: :water_buffalo: :water_buffalo:

:tiger2: :tiger2::rabbit2: :rabbit2::dragon: :dragon::goat: :goat: :goat::rooster: :rooster::dog2: :dog2::pig2: :pig2::mouse2: :mouse2::ox: :ox:

:dragon_face: :dragon_face: :blowfish: :blowfish: :crocodile: :crocodile:

:dromedary_camel: :leopard: :leopard: :cat2: :cat2:

 $: dromed ary_camel:$

:poodle: :poodle: :paw_prints: :paw_prints: :bouquet: :bouquet:

:rose: :rose: :sunflower: :sunflower: :hibiscus: :hibiscus:

:maple_leaf: :maple_leaf: :leaves: :leaves: :fallen_leaf: :fallen_leaf:

:herb: :herb: :mushroom: :mushroom: :cactus: :cactus:

:palm_tree: :palm_tree: :deciduous_tree: :deciduous_tree: :deciduous_tree:

:chestnut: :chestnut: :seedling: :seedling: :blossom: :blossom:

:ear_of_rice: :ear_of_rice: :shell: :shell: :globe_with_meridians:

:globe_with_meridians:

:sun_with_face: :sun_with_face: :full_moon_with_face: :new_moon_with_face: :new_moon_with_face: :new_moon_with_face:

:new_moon: :new_moon: :waxing_crescent_moon: :first_quarter_moon: :waxing_crescent_moon: :first_quarter_moon:



:umbrella: :umbrella: :cloud: :cloud: :sunny: :sunny:

:waxing_gibbous_moon: :full_moon: :full_moon: :waning_gibbous_moon: :waxing_gibbous_moon: :waning_gibbous_moon:

:last_quarter_moon: :waning_crescent_moon: :last_quarter_moon_with_face: :last_quarter_moon: :waning_crescent_moon: :last_quarter_moon_with_face:

:first_quarter_moon_with_face: :moon: :moon: :earth_africa: :earth_africa: :first_quarter_moon_with_face:

:earth_asia: :earth_asia: :earth_americas: :earth_americas: :volcano: :volcano:

:milky_way: :milky_way: :partly_sunny: :partly_sunny: :octocat: :octocat: :squirrel: :squirrel:

Objects

:shower: :shower:

:school_satchel: :school_satchel:

:bamboo: :bamboo: :dolls: :dolls: :gift_heart: :gift_heart:

:fireworks: :fireworks: :wind_chime: :wind_chime: :sparkler: :sparkler:

:mortar_board: :mortar_board:

:flags: :flags:

:jack_o_lantern: :jack_o_lantern: :ghost: :ghost: :rice_scene: :rice_scene:

:santa: :santa: :christmas_tree: :christmas_tree: :gift: :gift:

:bell: :bell: :no_bell: :no_bell: :tanabata_tree: :tanabata_tree:

:tada: :tada: :confetti_ball: :confetti_ball: :balloon: :balloon:

:crystal_ball: :crystal_ball: :dvd: :dvd: :cd: :cd:

:floppy_disk: :floppy_disk: :camera: :camera: :video_camera: :video_camera:

:movie_camera: :movie_camera: :computer: :computer: :tv: :tv:

:iphone: :iphone: :phone: :phone: :telephone: :telephone:

:telephone_receiver: :pager: :pager: :fax: :fax: :telephone_receiver:

:minidisc: :minidisc: :vhs: :vhs: :sound: :sound:

:speaker: :speaker: :mute: :mute: :loudspeaker: :loudspeaker:

:hourglass: :hourglass: :hourglass_flowing_sand: :mega: :mega:

:hourglass_flowing_sand:

:alarm_clock: :alarm_clock: :watch: :watch: :radio: :radio: :satellite: :satellite: :loop: :loop: :mag: :mag: :mag_right: :mag_right: :unlock: :unlock: :lock: :lock:

:lock_with_ink_pen: :closed_lock_with_key: :key: :key: :lock_with_ink_pen: :closed_lock_with_key:

:bulb: :bulb: :flashlight: :flashlight: :high_brightness: :high_brightness:

 $: low_brightness: : low_brightness:$:electric_plug: :electric_plug: :battery: :battery: :calling: :calling: :email: :email: :mailbox: :mailbox: :postbox: :postbox: :bath: :bath: :bathtub: :bathtub: :toilet: :toilet: :wrench: :wrench:

:nut_and_bolt: :nut_and_bolt: :hammer: :hammer: :seat: :seat: :moneybag: :moneybag: :yen: :yen: :dollar: :dollar:

:pound: :pound: :credit_card: :credit_card: :euro: :euro:



:bamboo: :bamboo: :gift_heart: :gift_heart: :dolls: :dolls:

:money_with_wings: :e-mail: :e-mail: :inbox_tray: :inbox_tray:

:money_with_wings:

:outbox_tray: :outbox_tray: :envelope: :envelope: :incoming_envelope:

 $: incoming_envelope:\\$

:postal_horn: :postal_horn: :mailbox_closed: :mailbox_closed: :mailbox_with_mail:

:mailbox_with_mail:

:books: :books:

:book: :book:

:mailbox_with_no_mail: :door: :door: :smoking: :smoking:

:mailbox_with_no_mail:

:bomb: :bomb: :gun: :gun: :hocho: :hocho:

:pill: :pill: :page_facing_up: :page_facing_up: :page_facing_up:

:page_with_curl: :bookmark_tabs: :bookmark_tabs: :bar_chart: :bar_chart:

 $: chart_with_upwards_trend: : chart_with_downwards_trend: : scroll: : scro$

:chart_with_upwards_trend: :chart_with_downwards_trend:

:clipboard: :clipboard: :calendar: :calendar: :date: :date:

:card_index: :card_index: :file_folder: :file_folder: :open_file_folder: :open_file_folder:

:scissors: :scissors: :pushpin: :pushpin: :paperclip: :paperclip:

:black_nib: :black_nib: :pencil2: :pencil2: :straight_ruler: :straight_ruler:

:triangular_ruler: :triangular_ruler: :closed_book: :closed_book: :green_book: :green_book:

:blue_book: :blue_book: :orange_book: :notebook: :notebook: :notebook:

:notebook_with_decorative_cover: :ledger: :ledger:

:notebook_with_decorative_cover:

:memo: :memo:

:bookmark: :bookmark: :name_badge: :name_badge: :microscope: :microscope:

:telescope: :telescope: :newspaper: :newspaper: :football: :football: :basketball: :basketball: :baseball: :ba

:tennis: :tennis: :8ball: :8ball: :rugby_football: :rugby_football:

:bowling: :bowling: :golf: :golf: :mountain_bicyclist:

:mountain_bicyclist:

:bicyclist: :bicyclist: :horse_racing: :horse_racing: :snowboarder: :snowboarder:

:swimmer: :swimmer: :surfer: :surfer: :ski: :ski: :spades: :spades: :hearts: :hearts: :clubs: :clubs: :diamonds: :diamonds: :gem: :gem: :ring: :ring:

:trophy: :trophy: :musical_score: :musical_score: :musical_keyboard: :musical_keyboard:

:violin: :violin: :space_invader: :space_invader: :video_game: :video_game:

:black_joker: :black_joker: :flower_playing_cards: :game_die: :game_die:

:flower_playing_cards:

:dart: :dart: :mahjong: :mahjong: :clapper: :clapper:

:art: :art: :microphone: :microphone: :headphones: :headphones:

:trumpet: :trumpet: :saxophone: :saxophone: :guitar: :guitar:

:pencil: :pencil:

:shoe: :shoe: :sandal: :sandal: :high_heel: :high_heel



:bamboo: :bamboo: :gift_heart: :gift_heart: :dolls: :dolls:

:lipstick: :lipstick: :boot: :boot: :shirt: :shirt:

:tshirt: :tshirt: :necktie: :necktie: :womans_clothes: :womans_clothes:

:dress: :dress: :jeans: :jeans: :jeans:

:running_shirt_with_sash:

:kimono: :kimono: :bikini: :bikini: :ribbon: :ribbon:

:tophat: :tophat: :crown: :crown: :womans_hat: :womans_hat:

:mans shoe: :mans shoe: :closed umbrella: :closed umbrella: :briefcase: :briefcase:

:handbag: :handbag: :pouch: :pouch: :purse: :purse: :eyeglasses: :eyeglasses: :fishing_pole_and_fish: :coffee: :coffee:

:fishing_pole_and_fish:

:tea: :tea: :sake: :sake: :baby_bottle: :baby_bottle:

:beer: :beer: :cocktail: :cocktail:

:tropical_drink: :tropical_drink: :wine_glass: :wine_glass: :fork_and_knife: :fork_and_knife:

:pizza: :pizza: :hamburger: :hamburger: :fries: :fries:

:poultry_leg: :poultry_leg: :meat_on_bone: :meat_on_bone: :spaghetti: :spaghetti:

:curry: :curry: :fried_shrimp: :fried_shrimp: :bento: :bento:

:sushi: :sushi: :fish_cake: :fish_cake: :rice_ball: :rice_ball:

:rice_cracker: :rice_cracker: :rice: :rice: :ramen: :ramen: :stew: :stew: :oden: :oden: :dango: :dango:

:egg: :egg: :bread: :bread: :doughnut: :doughnut: :custard: :custard: :icecream: :icecream: :ice_cream: :ice_cream: :ice_cream: :ce_cream: :ce_

 :shaved_ice:
 :birthday: :birthday:
 :cake: :cake:

 :cookie: :cookie:
 :chocolate_bar: :chocolate_bar:
 :candy: :candy:

 :lollipop: :lollipop:
 :honey_pot: :honey_pot:
 :apple: :apple:

 :green_apple: :green_apple:
 :tangerine: :tangerine:
 :lemon: :lemon:

:cherries: :cherries: :grapes: :grapes: :watermelon: :watermelon:

:strawberry: :strawberry: :peach: :peach: :melon: :melon:

:banana: :banana: :pear: :pear: :pineapple: :pineapple:

:sweet_potato: :sweet_potato: :eggplant: :eggplant: :tomato: :tomato: :tomato:

:corn: :corn:

Places

:house: :house_with_garden: :school: :school:

 $: house_with_garden:$

:office: :office: :post_office: :post_office: :hospital: :hospital:

:bank: :bank: :convenience_store: :love_hotel: :love_hotel:

:convenience_store:

:hotel: :hotel: :wedding: :wedding: :church: :church:

:department_store: :department_store: :european_post_office: :city_sunrise: :city_sunrise:

:european_post_office:



:house_with_garden: :school: :school: :house: :house:

:house_with_garden:

:city_sunset: :city_sunset: :japanese_castle: :japanese_castle: :european_castle: :european_castle:

:tent: :tent: :factory: :factory: :tokyo_tower: :tokyo_tower:

:japan: :japan: :mount_fuji: :mount_fuji: :sunrise_over_mountains:

:sunrise_over_mountains:

:slot_machine: :slot_machine:

:sunrise: :sunrise: :stars: :stars: :statue_of_liberty: :statue_of_liberty:

:bridge_at_night: :bridge_at_night: :carousel_horse: :carousel_horse: :rainbow: :rainbow:

:ferris_wheel: :ferris_wheel: :fountain: :fountain: :roller_coaster: :roller_coaster:

:ship: :ship: :speedboat: :speedboat: :boat: :boat:

:sailboat: :sailboat: :rowboat: :rowboat: :anchor: :anchor:

:rocket: :rocket: :airplane: :airplane: :helicopter: :helicopter:

:steam_locomotive: :steam_locomotive: :tram: :tram: :mountain_railway: :mountain_railway:

:bike: :bike: :suspension_railway: :aerial_tramway: :aerial_tramway: :suspension_railway:

:mountain_cableway: :tractor: :tractor: :blue_car: :blue_car:

:mountain_cableway:

:oncoming_automobile: :car: :car: :red_car: :red_car: :oncoming_automobile:

:taxi: :taxi: :oncoming_taxi: :oncoming_taxi: :articulated_lorry: :articulated_lorry:

:bus: :bus: :oncoming_bus: :oncoming_bus: :rotating_light: :rotating_light:

:police_car: :police_car: :oncoming_police_car: :fire_engine: :fire_engine:

:oncoming_police_car:

:ambulance: :ambulance: :truck: :truck: :minibus: :minibus: :train: :train: :station: :station: :train2: :train2:

:bullettrain_front: :bullettrain_front: :bullettrain_side: :bullettrain_side: :light_rail: :light_rail:

:monorail: :monorail: :railway_car: :railway_car: :trolleybus: :trolleybus: :ticket: :ticket: :fuelpump: :fuelpump: :vertical_traffic_light:

:vertical_traffic_light:

:traffic_light: :traffic_light: :construction: :construction: :warning: :warning:

:busstop: :busstop: :barber: :barber: :hotsprings: :hotsprings:

:checkered_flag: :checkered_flag: :crossed_flags: :crossed_flags: :izakaya_lantern: :izakaya_lantern:

:moyai: :moyai: :circus_tent: :circus_tent: :performing_arts: :performing_arts:

:round_pushpin: :round_pushpin: :triangular_flag_on_post: :jp: :jp:

:triangular_flag_on_post:

:atm: :atm:

:kr: :kr: :us: :us: :cn: :cn: :fr: :fr: :it: :it: :es: :es:

:ru: :ru: :gb: :gb: :uk: :uk:

:de: :de: **Symbols**

:beginner: :beginner:



:three: :three: :one: :one: :two: :two:

:four: :four: :five: :five: :six: :six: :seven: :seven: :eight: :eight: :nine: :nine: :1234: :1234: :keycap_ten: :keycap_ten: :zero: :zero:

:hash: :hash: :symbols: :symbols: :arrow_backward: :arrow_backward:

:arrow_down: :arrow_down: :arrow_forward: :arrow_forward: :arrow_left: :arrow_left:

:capital_abcd: :capital_abcd: :abcd: :abcd: :abc: :abc:

:arrow_lower_left: :arrow_lower_left: :arrow_lower_right: :arrow_right: :arrow_right:

:arrow_lower_right:

:arrow_upper_left: :arrow_upper_left: :arrow_upper_right: :arrow_up: :arrow_up:

:arrow_upper_right:

:arrow_double_down: :arrow_double_up: :arrow_double_up: :arrow_down_small: :arrow_double_down:

:arrow_down_small:

:arrow_heading_down: :leftwards_arrow_with_hook: :arrow_heading_up: :arrow_heading_down: :arrow_heading_up: $: leftwards_arrow_with_hook:$

:arrow_right_hook: :left_right_arrow: :left_right_arrow: :arrow_up_down: :arrow_up_down:

:arrow_right_hook:

:arrow_up_small: :arrow_up_small: :arrows_clockwise: :arrows_counterclockwise:

:arrows_counterclockwise:

:rewind: :rewind: :fast_forward: :fast_forward: :information_source:

:information_source:

:ok: :ok: :twisted_rightwards_arrows: :repeat: :repeat:

:twisted_rightwards_arrows:

:repeat_one: :repeat_one: :new: :new: :top: :top:

:up: :up: :cool: :cool: :free: :free:

:cinema: :cinema: :koko: :koko: :ng: :ng:

:signal_strength: :signal_strength: :u5272: :u5272: :u5408: :u5408:

:u55b6: :u55b6: :u6307: :u6307: :u6708: :u6708:

:u6709: :u6709: :u6e80: :u6e80: :u7121: :u7121: :u7533: :u7533: :u7a7a: :u7a7a: :u7981: :u7981:

:sa: :sa: :restroom: :restroom: :mens: :mens:

:womens: :womens: :baby_symbol: :baby_symbol: :no_smoking: :no_smoking:

:wheelchair: :wheelchair: :parking: :parking: :metro: :metro:

:accept: :accept: :baggage_claim: :baggage_claim: :wc: :wc:

:potable_water: :potable_water: :put_litter_in_its_place: :secret: :secret:

:put_litter_in_its_place:

:congratulations: :congratulations: :m: :m: :passport_control: :passport_control:

:left_luggage: :left_luggage: :customs: :customs: :ideograph_advantage:

:ideograph_advantage:

:cl: :cl: :id: :id: :sos: :sos:

:underage: :underage: :no_mobile_phones: :no_entry_sign: :no_entry_sign:

:no_mobile_phones:



:scorpius: :scorpius:

:three: :three: :one: :one: :two: :two:

:do_not_litter: :do_not_litter: :non-potable_water: :non-:no_bicycles: :no_bicycles:

potable_water:

:no_pedestrians: :no_pedestrians: :children_crossing: :no_entry: :no_entry:

:eight_spoked_asterisk: :eight_pointed_black_star: :heart_decoration: :heart_decoration: :eight_spoked_asterisk: :eight_pointed_black_star:

:vs: :vs: :vibration_mode: :vibration_mode: :mobile_phone_off:

:mobile_phone_off:

:chart: :chart: :currency_exchange: :aries: :aries:

:currency_exchange:

:taurus: :taurus: :cancer: :cancer: :gemini: :gemini:

:leo: :leo: :virgo: :virgo: :libra: :libra:

:sagittarius: :sagittarius: :ophiuchus: :ophiuchus: :aquarius: :aquarius: :pisces: :pisces:

:six_pointed_star: :six_pointed_star: :negative_squared_cross_mark: :a: :a:

:negative_squared_cross_mark:

:b: :b: :02: :02: :ab: :ab:

:diamond_shape_with_a_dot_inside: :recycle: :recycle: :end: :end: $: diamond_shape_with_a_dot_inside:$

on: :on: :soon: :soon: :clock1: :clock1:

:clock130: :clock130: :clock10: :clock10: :clock1030: :clock1030:

:clock11: :clock11: :clock1130: :clock1130: :clock12: :clock12: :clock1230: :clock1230: :clock2: :clock2: :clock230: :clock230:

:clock3: :clock3: :clock330: :clock330: :clock4: :clock4:

:clock430: :clock430: :clock5: :clock5: :clock530: :clock530:

:clock630: :clock630: :clock6: :clock6: :clock7: :clock7:

:clock730: :clock730: :clock8: :clock8: :clock830: :clock830:

:clock9: :clock9: :clock930: :clock930: :heavy_dollar_sign: :heavy_dollar_sign:

:copyright: :copyright: :registered: :registered: :tm: :tm:

:heavy_exclamation_mark: :bangbang: :bangbang: :x: :x:

:heavy_exclamation_mark:

:interrobang: :interrobang: :0: :0: :heavy_multiplication_x:

:heavy_multiplication_x:

:capricorn: :capricorn:

:heavy_plus_sign: :heavy_plus_sign: :heavy minus sign: :heavy division sign:

> :heavy_minus_sign: :heavy_division_sign:

:white_flower: :white_flower: :100: :100: :heavy_check_mark:

:heavy_check_mark:

:ballot_box_with_check: :radio_button: :radio_button: :link: :link: :ballot_box_with_check:

:curly_loop: :curly_loop: :wavy_dash: :wavy_dash: :part_alternation_mark:

:part_alternation_mark:

:trident: :trident: :black_square: :black_square: :white_square: :white_square:



:one: :one:

:white_check_mark:
:white_check_mark:

:black_circle: :black_circle:

 $: large_blue_circle: : large_blue_circle:$

:small_blue_diamond: :small_blue_diamond:

:small_red_triangle_down:
:small_red_triangle_down:

:two: :two:

:black_square_button: :black_square_button:

:white_circle: :white_circle:

:large_blue_diamond: :large_blue_diamond:

:small_orange_diamond:
:small_orange_diamond:

:shipit: :shipit:

:three: :three:

:white_square_button:
:white_square_button:

:red_circle: :red_circle:

:large_orange_diamond: :large_orange_diamond:

:small_red_triangle:
:small_red_triangle:





Figure 1: Last Page