

openapi: "3.0.0"

```
info:
  version: 0.0.4
  title: Common Loans API (Public)
  description:
    This specification defines a simple loans API for loan types used in Switzerland. The API is
    supposed to be used by customers who want to get, extend, or transfer loans from and to banks.
  termsOfService: ''
  contact:
    email: api@sfti.ch
  license:
    name: Apache 2.0
    url: 'http://www.apache.org/licenses/LICENSE-2.0.html'
servers:
  - url: loans.sfti.ch
paths:
  /expiring-mortgages:
    get:
      tags:
        - Expiring Mortgages
      description: The expiring mortgages for the authenticated context including the
      corresponding properties and related mortgages.
      summary: Return the list of all expiring mortgages for the authenticated context
      responses:
        '200':
          description: Paginated list of all expiring mortgages with all related information
          content:
            application/json:
              schema:
                type: object
                properties:
                  ExpiringMortgageList:
                    type: array
                    items:
                      $ref: '#/components/schemas/ExpiringMortgage'
                  _links:
                    $ref: '#/components/schemas/Links'

  /expiring-mortgages/{mortgageId}:
    get:
      tags:
        - Expiring Mortgages
      description: A specific expiring mortgage for the authenticated context including the
      corresponding properties and related mortgages.
      summary: Return a specific mortgage for the authenticated context
      parameters:
        - name: mortgageId
          in: path
          description: ID of a specific expiring mortgage
          required: true
          schema:
            type: string
      responses:
        '200':
          description: Mortgage details with the corresponding properties and related mortgages.
          content:
            application/json:
              schema:
                type: object
                properties:
                  ExpiringMortgage:
                    $ref: '#/components/schemas/ExpiringMortgage'
                  _links:
                    $ref: '#/components/schemas/Links'

  /expiring-mortgages/{mortgageId}/offers:
    get:
      tags:
        - Offers for an expiring mortgage
      description: Get offer framework for the to be extended mortgage.
      summary: Get all active offers for a specific tranche
      parameters:
        - name: mortgageId
          in: path
          description: ID of a specific expiring mortgage
          required: true
          schema:
            type: string
      responses:
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'200':
  description: Paginated list of all offers for a specific expiring mortgage
  content:
    application/json:
      schema:
        type: object
        properties:
          offerList:
            type: array
            items:
              $ref: '#/components/schemas/Offer'
          _links:
            $ref: '#/components/schemas/Links'

/expiring-mortgages/{mortgageId}/offers/{offerId}:
  get:
    tags:
      - Offers for an expiring mortgage
    description: Get a specific offer for the to be extended mortgage.
    summary: Get a specific offer for a specific tranche
    parameters:
      - name: mortgageId
        in: path
        description: ID of a specific expiring mortgage
        required: true
        schema:
          type: string
      - name: offerId
        in: path
        description: ID of a specific mortgage prolongation offer
        required: true
        schema:
          type: string
    responses:
      '200':
        description: Specific offer for a specific expiring mortgage
        content:
          application/json:
            schema:
              type: object
              properties:
                offer:
                  $ref: '#/components/schemas/Offer'

/expiring-mortgages/orders:
  post:
    tags:
      - Order an offered product
    summary: Place an order according to an offer
    description: Place an order according to an offer, referencing a specific offer with a
specific condition
    operationId: placeMortgageOrder
    requestBody:
      description: Details of the order to be added
      required: true
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Order'
    responses:
      '201':
        description: created
        headers:
          location:
            schema:
              type: string
              format: uri
            description: link to the created resource
  get:
    tags:
      - Order an offered product
    description: Get all orders placed for offered products
    summary: Get status for all placed orders of the authenticated context
    responses:
      '200':
        description: Paginated list of all orders placed in the authenticated context
        content:
          application/json:
            schema:
              type: object
              properties:

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        orderList:
          type: array
          items:
            $ref: '#/components/schemas/Order'
        _links:
          $ref: '#/components/schemas/Links'

/expiring-mortgages/orders/{orderId}:
  get:
    tags:
      - Order an offered product
    description: Get information for a specific order
    summary: Get information for a specific order
    parameters:
      - name: orderId
        in: path
        description: ID of a specific order
        required: true
        schema:
          type: string
    responses:
      '200':
        description: Current status details for the given order
        content:
          application/json:
            schema:
              type: object
              required:
                - order
              properties:
                order:
                  $ref: '#/components/schemas/Order'

# -----
# ----- Models -----
# -----
components:
  schemas:
    # ---- Property Object ----
    PropertyObject:
      description: The representation of a real estate object, real estate register id
      (propertyIdentifier) is optional until otherwise required by law
      type: object
      required:
        - propertyObjectId
        - name
        - address
      properties:
        propertyObjectId:
          type: string
        name:
          type: string
        address:
          $ref: '#/components/schemas/Address'
        propertyIdentifier:
          $ref: '#/components/schemas/PropertyIdentifier'
    # -----

    # ---- Property Identifier ----
    PropertyIdentifier:
      description: Property identification (register of real estate)
      type: object
      properties:
        EGRID:
          type: string
        EGID:
          type: string
    # -----

    # ---- Mortgage ----
    Mortgage:
      type: object
      required:
        - mortgageId
        - product
        - amountAtExpiry
        - validFrom
        - validTo
        - interestRate
        - interestRateType
        - interestBasis

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- durationType
- prolongable
properties:
  mortgageId:
    type: string
  product:
    $ref: '#/components/schemas/Product'
  amountAtExpiry:
    $ref: '#/components/schemas/Amount'
  amountToday:
    $ref: '#/components/schemas/Amount'
  validFrom:
    $ref: '#/components/schemas/Date'
  validTo:
    $ref: '#/components/schemas/Date'
  interestRate:
    type: string
  interestRateType:
    type: string
  interestBasis:
    type: string
  durationType:
    type: string
  prolongable:
    type: boolean
# -----

# ---- Expiring Mortgage ----
ExpiringMortgage:
  type: object
  required:
    - mortgageId
    - product
    - amountAtExpiry
    - validFrom
    - validTo
    - interestRate
    - interestRateType
    - interestBasis
    - durationType
    - prolongable
    - propertyObjects
    - linkRef
  properties:
    mortgageId:
      type: string
    product:
      $ref: '#/components/schemas/Product'
    amountAtExpiry:
      $ref: '#/components/schemas/Amount'
    amountToday:
      $ref: '#/components/schemas/Amount'
    validFrom:
      $ref: '#/components/schemas/Date'
    validTo:
      $ref: '#/components/schemas/Date'
    interestRate:
      type: string
    interestRateType:
      type: string
    interestBasis:
      type: string
    durationType:
      type: string
    prolongable:
      type: boolean
    propertyObjects:
      type: array
      items:
        $ref: '#/components/schemas/PropertyObject'
    relatedMortgages:
      type: array
      items:
        $ref: '#/components/schemas/Mortgage'
    linkRef:
      type: string
# -----

# ---- Mortgage Prolongation Offer ----
Offer:
  type: object

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required:
  - offerId
  - totalAmount
  - validTo
  - linkRef
properties:
  offerId:
    type: string
  totalAmount:
    $ref: '#/components/schemas/Amount'
  validTo:
    $ref: '#/components/schemas/Date'
  offerItems:
    type: array
    items:
      $ref: '#/components/schemas/OfferItem'
  linkRef:
    type: string
# -----

# ---- Mortgage Prolongation Offer Item ----
OfferItem:
  type: object
  required:
    - offerItemId
    - product
    - conditions
  properties:
    offerItemId:
      type: string
    product:
      $ref: '#/components/schemas/Product'
    conditions:
      type: array
      items:
        $ref: '#/components/schemas/Condition'
# -----

# ---- Mortgage Product ----
Product:
  type: object
  required:
    - productId
    - name
    - interestRateType
    - interestBasis
    - durationType
  properties:
    productId:
      type: string
    name:
      type: string
    interestRateType:
      type: string
    interestBasis:
      type: string
    durationType:
      type: string
# -----

# ---- Mortgage Tranche Offer Product Condition ----
Condition:
  type: object
  required:
    - conditionId
    - duration
    - maturityDate
    - interest
    - amountRange
    - increment
  properties:
    conditionId:
      type: string
    duration:
      type: string
    maturityDate:
      $ref: '#/components/schemas/Date'
    interest:
      $ref: '#/components/schemas/Interest'
    amountRange:
      $ref: '#/components/schemas/AmountRange'

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    increment:
      type: integer
# -----
# ---- Order ----
Order:
  type: object
  required:
    - offerId
    - conditionId
    - mortgageId
    - amount
    - offeredInterest
  properties:
    offerId:
      type: string
    conditionId:
      type: string
    mortgageId:
      type: string
    amount:
      $ref: '#/components/schemas/Amount'
    offeredInterest:
      $ref: '#/components/schemas/Interest'
    validateOnly:
      type: boolean
    status:
      type: string
# -----

# ---- AmountRange ----
AmountRange:
  description: min and max amount with currency
  type: object
  required:
    - currency
    - minContent
    - maxContent
  properties:
    currency:
      $ref: '#/components/schemas/Currency'
    minContent:
      description: min amount given with fractional digits, the separator is a dot
      type: string
      pattern: '-?\d{1,14}(\?:\.\d{1,3})?'
    maxContent:
      description: max amount given with fractional digits, the separator is a dot
      type: string
      pattern: '-?\d{1,14}(\?:\.\d{1,3})?'
# -----

# ---- Interest ----
Interest:
  type: object
  required:
    - currentRate
  properties:
    currentRate:
      type: string
    base:
      type: string
# -----

# ***** BEGIN MERGED COMMON DATA MODEL *****

# ---- Currency ----
Currency:
  description: ISO 4217 code
  type: string
  pattern: '[A-Z]{3}'
# -----

# ---- Amount ----
Amount:
  description: amount with currency
  type: object
  required:
    - currency
    - content
  properties:
    currency:

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    $ref: '#/components/schemas/Currency'
  content:
    description: amount given with fractional digits, the separator is a dot
    type: string
    pattern: '-?\d{1,14}(\?:\.\d{1,3})?'
# -----

# ---- Address ----
Address:
  type: object
  properties:
    street:
      type: string
      maxLength: 70
    buildingNumber:
      type: string
    city:
      type: string
    postalCode:
      type: string
    country:
      $ref: '#/components/schemas/Country'
# -----

# ---- Country Code ----
Country:
  type: string
  pattern: '[A-Z]{2}'
  example: CH
  description: 2-Letter ISO 3166-2 Country Code
# -----

# ---- Date Formats
Date:
  type: string
  format: date
  example: 2018-04-13

DateTime:
  type: string
  format: date-time
  example: 2018-04-13T11:11:11Z
# -----

# ---- Links ----
Links:
  description: links returned in the answer of an API call
  type: object
  properties:
    self:
      type: string
    first:
      type: string
    previous:
      type: string
    next:
      type: string
    last:
      type: string
# -----

# ***** END MERGED COMMON DATA MODEL *****

externalDocs:
  description: Find out more about SFTI API specifications
  url: 'https://www.swissfintechinnovations.ch/API-Specifications'
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