

## LOGIN APIs

### 1) POST /login

**Description :-** This API is used to login.

**API Fields :-**

<b>API</b>	To login
<b>Method</b>	POST
<b>Request</b>	/login
<b>Status</b>	200

**Body Fields :-**

Field	Type	Mandatory	Description
username	String	Y	Username for the account
password	String	Y	Password for the account

**Success Response Fields :-**

Field	Type	Mandatory	Description
userId	Long	Y	UserId
user	User object	Y	User details
accountType	String	Y	Account Type i.e. SAVINGS, CURRENT etc
accountStatu	String	Y	Account Status i.e.

s			ACTIVE, CLOSED etc
createdOn	Date	Y	Date on which account got created
balance	BigDecimal	Y	Balance in that account

### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/login>

**Body :-** {"username":"kakati","password":"jakati"}

### Success Response :-

<pre>{   "id": 55,   "user": {     "id": 69,     "username": "kakati"   },   "accountType": "SAVINGS",   "accountStatus": "ACTIVE",   "createdOn": "2018-07-05T08:26:17.026+0000",   "balance": 200 }</pre>
---

### Failure Response :-

**Body :-** {"username":"kakati","password":"jakati"}

```
{
  "message": "Invalid username or password.",
  "code": "PRECONDITION_FAILED"
}
```

## USER APIs

### 2) POST /api/users

**Description :-** This API is used to create an user.

**API Fields :-**

<b>API</b>	To create an user
<b>Method</b>	POST
<b>Request</b>	/api/users
<b>Status</b>	200

**Body Fields :-**

Field	Type	Mandatory	Description
username	String	Y	Username for the account
password	String	Y	Password for the account

**Success Response Fields :-**

Field	Type	Description
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id	Long	Id for the user
username	String	Username of the user

### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/users>

**Body :-** {"username":"kakati","password":"jakati"}

### Success Response :-

<pre>{   "id": 91,   "username": "kakati" }</pre>
---

### Failure Response :-

**Body :-** {"username":"kakati","password":"jakati"}

<pre>{   "message": "The username kakati is already exists, Please select a different username.",   "code": "PRECONDITION_FAILED" }</pre>
---

### 3) PUT /api/users

**Description :-** This API is used to update an user.

**API Fields :-**

<b>API</b>	To update an user
<b>Method</b>	PUT
<b>Request</b>	/api/users
<b>Status</b>	200

**Body Fields :-**

Field	Type	Mandatory	Description
username	String	Y	Username for the account
password	String	Y	Password for the account

**Success Response Fields :-**

Field	Type	Description
id	Long	Id for the user
username	String	Username of the user

**Failure Response Fields :-**

Field	Description
code	Code for the exception occurred
message	Error message

**Sample Request and Response :-**

**Request :-** <http://localhost:8080/api/users>

**Body :-** {"username":"kakati","password":"qwertyakati"}

**Success Response :-**

```
{
  "id": 91,
  "username": "kakati"
}
```

**Failure Response :-**

**Body :-** {"username":"kakatqi","password":"jakati"}

```
{
  "message": "The username kakatqi does not exists.",
  "code": "PRECONDITION_FAILED"
}
```

**4) DELETE /api/users**

**Description :-** This API is used to delete an user.

**API Fields :-**

<b>API</b>	To delete an user
<b>Method</b>	DELETE
<b>Request</b>	/api/users
<b>Status</b>	200

**Body Fields :-**

Field	Type	Mandatory	Description
username	String	Y	Username for the account

password	String	Y	Password for the account
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### Success Response Fields :-

Field	Type	Description
id	Long	Id for the user
username	String	Username of the user

### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/users>

**Body :-** {"username":"kakati","password":"qwertyakati"}

### Success Response :-

<pre>{   "id": 91,   "username": "kakati" }</pre>
---

### Failure Response :-

**Body :-** {"username":"kakatqi","password":"jakati"}

<pre>{   "message": "The username kakatqi does not exists.",   "code": "PRECONDITION_FAILED" }</pre>
--

```
}
```

## ACCOUNT APIs

### 5) POST /api/accounts

**Description :-** This API is used to create an account.

**API Fields :-**

<b>API</b>	To create an account
<b>Method</b>	POST
<b>Request</b>	/api/accounts
<b>Status</b>	200

**Body Fields :-**

Field	Type	Description
userId	Long	User Id for which the account need to be created
amount	BigDecimal	Initial amount

**Success Response Fields :-**

Field	Type	Mandatory	Description
userId	Long	Y	UserId for which the account has to be created
user	User object	Y	User details



accountType	String	Y	Account Type i.e. SAVINGS, CURRENT etc
accountStatus	String	Y	Account Status i.e. ACTIVE, CLOSED etc
createdOn	Date	Y	Date on which account got created
balance	BigDecimal	Y	Balance in that account

### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/accounts>

**Body :-** {"userId":"69","amount":"200"}

### Success Response :-

```
{
  "id": 55,
  "user": {
    "id": 69,
    "username": "kakati"
  },
  "accountType": "SAVINGS",
  "accountStatus": "ACTIVE",
  "createdOn": "2018-07-05T08:26:17.026+0000",
  "balance": 200
}
```

### Failure Response :-

**Body** :- {"userId":"9","amount":"200"}

```
{  
  "message": "The user id 9 does not exists.",  
  "code": "PRECONDITION_FAILED"  
}
```

### 6) PUT /api/accounts

**Description** :- This API is used to update an account.

**API Fields** :-

<b>API</b>	To update an account
<b>Method</b>	PUT
<b>Request</b>	/api/accounts
<b>Status</b>	200

**Body Fields** :-

Field	Type	Description
accountId	Long	Account Id for updation
accountStatus	String	Status to be changed for the account

**Success Response Fields** :-

Field	Type	Mandatory	Description
userId	Long	Y	UserId for which the account has to be created
user	User object	Y	User details
accountType	String	Y	Account Type i.e. SAVINGS, CURRENT etc
accountStatus	String	Y	Account Status i.e. ACTIVE, CLOSED etc
createdOn	Date	Y	Date on which account got created
balance	BigDecimal	Y	Balance in that account

#### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

#### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/accounts>

**Body :-** {"accountId": "55", "accountStatus": "CLOSED"}

#### Success Response :-

<pre>{   "id": 55,   "user": {     "id": 69,     "username": "kakati"   } }</pre>
---

```
{  
  "accountType": "SAVINGS",  
  "accountStatus": "CLOSED",  
  "createdOn": "2018-07-05T08:26:17.026+0000",  
  "balance": 200  
}
```

### Failure Response :-

**Body** :- {"accountId":"9","accountStatus":"CLOSED"}

```
{  
  "message": "The account id 9 does not exists.",  
  "code": "PRECONDITION_FAILED"  
}
```

### 7) GET /api/accounts/<accountId>

**Description** :- This API is used to update an account.

**API Fields** :-

<b>API</b>	To get details of an account
<b>Method</b>	GET
<b>Request</b>	/api/accounts
<b>Status</b>	200

**Path Fields** :-

Field	Type	Description
accountId	Long	Account Id to get details

### Success Response Fields :-

Field	Type	Mandatory	Description
userId	Long	Y	UserId for which the account has to be created
user	User object	Y	User details
accountType	String	Y	Account Type i.e. SAVINGS, CURRENT etc
accountStatus	String	Y	Account Status i.e. ACTIVE, CLOSED etc
createdOn	Date	Y	Date on which account got created
balance	BigDecimal	Y	Balance in that account

### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/accounts/55>

### Success Response :-

```
[
  {
    "id": 55,
    "user": {
      "id": 69,
      "username": "kakati"
    },
    "accountType": "SAVINGS",
    "accountStatus": "CLOSED",
    "createdOn": "2018-07-05T08:26:17.000+0000",
    "balance": 200
  }
]
```

### Failure Response :-

```
{
  "message": "The account id 9 does not exists.",
  "code": "PRECONDITION_FAILED"
}
```

## TRANSACTION APIs

### 8) POST /api/transactions/credit

**Description :-** This API is used to credit an amount to an account

**API Fields :-**

<b>API</b>	To credit an amount to an account
<b>Method</b>	POST
<b>Request</b>	/api/transactions/credit

<b>Status</b>	200
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#### Body Fields :-

Field	Type	Description
accountId	Long	Account Id for which credit has to be made
amount	BigDecimal	Amount to be credited

#### Success Response Fields :-

Field	Type	Mandatory	Description
userId	Long	Y	UserId
user	User object	Y	User details
accountType	String	Y	Account Type i.e. SAVINGS, CURRENT etc
accountStatus	String	Y	Account Status i.e. ACTIVE, CLOSED etc
createdOn	Date	Y	Date on which account got created
balance	BigDecimal	Y	Balance in that account

#### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/transactions/credit>

**Body :-** {"accountId":"55","amount":"50"}

### Success Response :-

```
{
  "id": 55,
  "user": {
    "id": 69,
    "username": "kakati"
  },
  "accountType": "SAVINGS",
  "accountStatus": "ACTIVE",
  "createdOn": "2018-07-05T08:26:17.000+0000",
  "balance": 250
}
```

### Failure Response :-

**Body :-** {"accountId":"25","amount":"200"}

```
{
  "message": "The Account with id 25 does not exists.",
  "code": "PRECONDITION_FAILED"
}

{
  "message": "Negative amount cannot be added.",
  "code": "PRECONDITION_FAILED"
}
```

### 9) POST /api/transactions/debit

**Description :-** This API is used to debit an amount from an account

**API Fields :-**



<b>API</b>	To debit an amount from an account
<b>Method</b>	POST
<b>Request</b>	/api/transactions/debit
<b>Status</b>	200

#### Body Fields :-

Field	Type	Description
accountId	Long	Account Id for which debit has to be made
amount	BigDecimal	Amount to be debited

#### Success Response Fields :-

Field	Type	Mandatory	Description
userId	Long	Y	UserId
user	User object	Y	User details
accountType	String	Y	Account Type i.e. SAVINGS, CURRENT etc
accountStatus	String	Y	Account Status i.e. ACTIVE, CLOSED etc
createdOn	Date	Y	Date on which account got created
balance	BigDecimal	Y	Balance in that account

#### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/transactions/debit>

**Body :-** {"accountId":"55","amount":"50"}

### Success Response :-

```
{
  "id": 55,
  "user": {
    "id": 69,
    "username": "kakati"
  },
  "accountType": "SAVINGS",
  "accountStatus": "ACTIVE",
  "createdOn": "2018-07-05T08:26:17.000+0000",
  "balance": 200
}
```

### Failure Response :-

**Body :-** {"accountId":"25","amount":"200"}

```
{
  "message": "The Account with id 25 does not exists.",
  "code": "PRECONDITION_FAILED"
}

{
  "message": "Negative amount cannot be added.",
  "code": "PRECONDITION_FAILED"
}
```

#### 10) POST /api/transactions/transfer

**Description :-** This API is used to transfer an amount from account to another account

#### API Fields :-

<b>API</b>	To debit an amount from an account
<b>Method</b>	POST
<b>Request</b>	/api/transactions/transfer
<b>Status</b>	200

#### Body Fields :-

Field	Type	Description
accountId	Long	Account Id for which debit has to be made
toAccountId	Long	Account Id for which credit has to be made
amount	BigDecimal	Amount to be debited

#### Success Response Fields :-

Field	Type	Mandatory	Description
userId	Long	Y	UserId
user	User object	Y	User details
accountType	String	Y	Account Type i.e. SAVINGS, CURRENT etc
accountStatus	String	Y	Account Status i.e. ACTIVE, CLOSED etc
createdOn	Date	Y	Date on which account got created

balance	BigDecimal	Y	Balance in that account
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### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/transactions/transfer>

**Body :-** {"accountId":"55","toAccountId":"54","amount":"50"}

### Success Response :-

```
{
  "id": 55,
  "user": {
    "id": 69,
    "username": "kakati"
  },
  "accountType": "SAVINGS",
  "accountStatus": "ACTIVE",
  "createdOn": "2018-07-05T08:26:17.000+0000",
  "balance": 150
}
```

### Failure Response :-

**Body :-** {"accountId":"55","toAccountId":"53","amount":"50"}

```
{
  "message": "The Account with id 53 does not exists.",
  "code": "PRECONDITION_FAILED"
}
```

```
{
  "message": "Negative amount cannot be added.",
  "code": "PRECONDITION_FAILED"
}
```

### 11) GET /api/transactions/accounts/<accountId>

**Description :-** This API is used to get all the transaction for the account

#### API Fields :-

<b>API</b>	To get all the transaction for the account
<b>Method</b>	GET
<b>Request</b>	/api/transactions/accounts/<accountId>
<b>Status</b>	200

#### Path Fields :-

Field	Type	Description
accountId	Long	Account Id to get details

#### Request Parameters :-

Field	Type	Mandatory	Description
from	Long (in millies)	N	Filter list on submitted date from
to	Long (in millies)	N	Filter list on submitted date to
size	Integer ( <b>Default 10</b> )	N	Size of the list

#### Success Response Fields :-

Field	Type	Mandatory	Description
id	Long	Y	Transaction id
accountId	Long	Y	Account id
transactionType	String	Y	Transaction type i.e. CREDIT, DEBIT
createdOn	Date	Y	Date on which transaction got created

### Failure Response Fields :-

Field	Description
code	Code for the exception occurred
message	Error message

### Sample Request and Response :-

**Request :-** <http://localhost:8080/api/transactions/accounts/55>

### Success Response :-

<pre>[   {     "id": 5,     "accountId": 55,     "body": "The amount 50 was debited from the account id 55",     "transactionType": "DEBIT",     "transactionOn": "2018-07-05T08:59:22.000+0000"   },   {     "id": 4,     "accountId": 55,     "body": "The amount 50 was debited from the account id 55",     "transactionType": "DEBIT",     "transactionOn": "2018-07-05T08:56:12.000+0000"   } ]</pre>
---

```
},
{
  "id": 3,
  "accountId": 55,
  "body": "The amount 50 was added to the account id 55",
  "transactionType": "CREDIT",
  "transactionOn": "2018-07-05T08:47:02.000+0000"
},
{
  "id": 2,
  "accountId": 55,
  "body": "A new Account has been created with id 55 and amount with 200",
  "transactionType": "CREDIT",
  "transactionOn": "2018-07-05T08:26:17.000+0000"
}
]
```

### **Failure Response :-**

**Body** :- {"accountId":"55","toAccountId":"53","amount":"50"}

```
[
  {
    "message": "The Account with id 53 does not exists.",
    "code": "PRECONDITION_FAILED"
  }
]
```