

# IFN653 – Business Process Automation

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## 1.0 Getting Started

This system is a banking system that will provide the functionality to assess the loan applications processes. This manual will guide the User (bank employees) with all the necessary steps and procedures that are needed to be followed to use the automated application process of loan assessment.

### 1.1 System Overview

- Loan application assessment is a YAWL-based automated process that automatically allows the bank employee to perform several loan processing tasks.
- The process begins when the application is submitted to the loan department. All the applications are archived in the banks' databases irrespective of the result.
- The responsible employee will assess the information and forward it to the financial department.
- The financial department assesses the application based on users' financial standings, which reflects the final result.
- Users can cancel the application at any stage during the process of loan assessment.

### 1.2 User Elements

The Loan application page consists of multiple elements where the user will interact with them. All those elements are as follows: -

1. **Work Queues:** - All the tasks with their specification and case ID will pop up in the **work queue**.
2. **Edit Profile:** - In this tab, users can edit their profile information and passwords. Users also can check Piled tasks in this tab.
3. **Admin Queues:** - Tasks received can be offered to other department employees from this tab by selecting the **“Offer.”** The task received can be allocated to the respective employee by selecting the button **“Allocate.”** The task will be started by selecting **“Start”** and can assign to himself by selecting **“Directly to me.”**

4. Team Queues: - In this tab, all the assigned tasks to the employees, their department can be seen.
5. Users: - In this tab, new employees, their roles can be added with their User ID and Password.
6. Org Data: - The User can define the roles of employees along with whom they belong. The positions of the employee can be set and whom they can report to. In “Org groups,” several departments can be added.

## 2.0 Resource Perspectives

This Resource Perspective contains a set of views to help the user to get started with the resource allocation and assigning the roles.

### 2.1 Adding Roles

The screenshot displays the YAWL application interface. At the top, there is a blue header bar with a navigation menu containing icons for a play button, a sequence of letters 'Y', 'A', 'W', 'L', and a square. Below this is a secondary navigation bar with buttons for 'Work Queues', 'Edit Profile', and 'Logout'. A main navigation bar below that includes 'Admin Queues', 'Team Queues', 'Cases', 'Users', 'Org Data' (which is highlighted), 'Assets', 'Calendar', 'Services', and 'Client Apps'. The 'Org Data' section is open, showing sub-tabs for 'Roles', 'Capabilities', 'Positions', and 'OrgGroups'. The 'Roles' tab is active, displaying a list of roles on the left: 'Financial officer', 'Insurance Sales representative' (which is selected), 'Loan Officer', and 'Property Valuer'. To the right of the list, there are fields for 'Description' (containing 'HOME, LIFE, CREDIT CARD'), 'Belongs To' (a dropdown menu with 'nil' selected), and 'Notes'. At the bottom left, there is a 'Name' field with 'Insurance Sales representative' and a 'Members (2)' dropdown with 'neeti mohan'. On the bottom right, there are four buttons: 'Save', 'New', 'Reset', and 'Remove'. At the very bottom of the interface, a small footer text reads: 'YAWL version 4.5 | Engine build 4.5.1639 (2021/10/18 12:24) | Resource Service build 4.5.4092 (2021/10/18 11:31)'.

To create the roles in the organisation, the User needs to follow the instruction below: -

- a. Click on the **“OrgData”**
- b. Select **“Roles”**
- c. Click on **“New”**
- d. Add the roles.
- e. Click **Add & Save**.
- f. Repeat all the above steps until all the roles are added.

This is the process for adding the roles in the YAWL application. E.g., Loan officer, financial officer, Applicant, Property Valuer, etc.

## 2.2 Adding Participants

The screenshot shows the YAWL application interface. At the top, there is a blue header bar with the YAWL logo (a sequence of icons: a play button, a square with 'Y', a circle with 'A', a square with 'W', a circle with 'L', and a square with a play button). Below the header is a navigation bar with buttons: Work Queues, Edit Profile, Logout, Admin Queues, Team Queues, Cases, Users (selected), Org Data, Assets, Calendar, Services, and Client Apps. The main content area is divided into two columns. The left column contains a form for adding a participant, with fields for Participant (a dropdown), First Name, Last Name, User ID, Description, and Notes. There is also a checkbox for 'Administrator'. The right column contains a 'Privileges' section with several checkboxes: Choose Which Work Item to Start, Start Work Items Concurrently, Reorder Work Items, View All Work Items of Team, View All Work Items of Org Group, Chain Work Item Execution, and Manage Cases. Below the privileges section is a 'Password' section with 'New' and 'Confirm' fields. At the bottom, there are buttons for Save, New, Reset, and Remove. Below the participant form, there are tabs for Roles, Positions, and Capabilities. The Roles tab is selected, showing two lists: 'Owns' and 'Available'. The 'Available' list contains 'Financial Officer' and 'Loan Officer'.

To create the participants in the organisation, the User needs to follow the instruction below:

-

- Click **“New.”**
- Add the **“First Name,” “Last Name.”**
- Allocate a **User ID & Password**. For, e.g., User Id: 1001, Password: apple.

Select the available Roles for the participant. (Refer to the figures below)

The first screenshot shows the 'Roles' tab selected in the participant form. The 'Available' list contains 'Financial Officer' and 'Loan Officer'. The 'Owns' list is empty. The second screenshot shows the same interface, but the 'Financial Officer' role has been moved from the 'Available' list to the 'Owns' list, indicating it has been selected for the participant.

## 3.0 Loan Application Guide

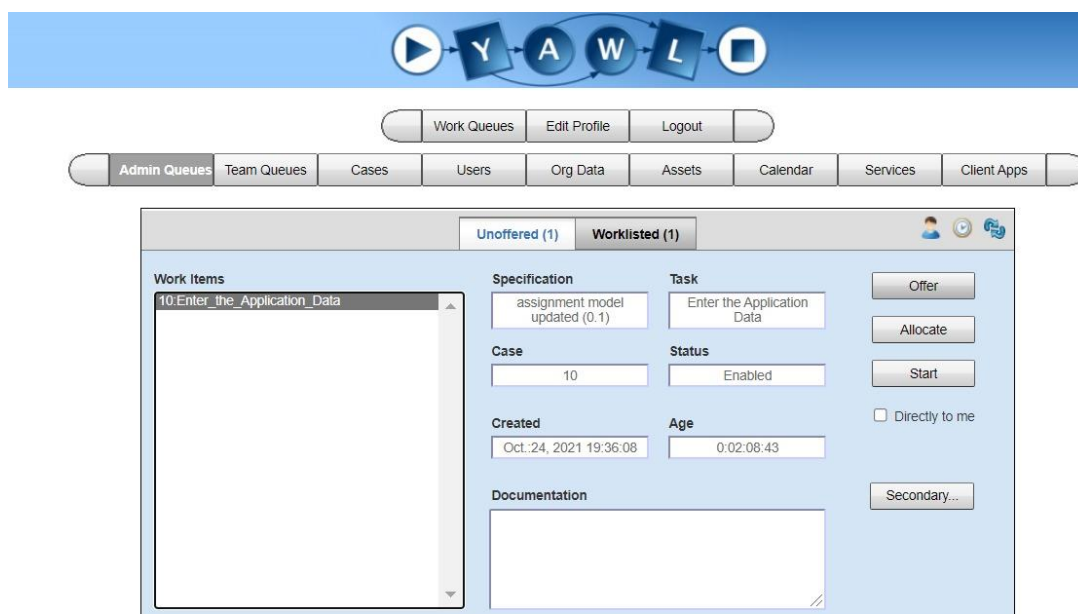
### 3.1 Login Page



The login page features a blue header with the YAWL logo, which consists of a play button, the letters Y, A, W, L in blue squares, and a stop button. Below the header is a light blue box containing the login form. The form has two input fields: 'User Name:' and 'Password:', each followed by a white text box. Below these fields is a grey 'Login' button.

To log in to the YAWL system, the User must enter the Username and Password and click on the Login button. The default Log ID and Password is.: - Username – admin, Password- YAWL. This default username and password can be updated after login.

### 3.2 Admin Queues



The Admin Queues interface has a blue header with the YAWL logo. Below the header is a navigation bar with buttons: 'Work Queues', 'Edit Profile', and 'Logout'. Below this is a secondary navigation bar with buttons: 'Admin Queues', 'Team Queues', 'Cases', 'Users', 'Org Data', 'Assets', 'Calendar', 'Services', and 'Client Apps'. The main content area is divided into two tabs: 'Unoffered (1)' and 'Worklisted (1)'. The 'Worklisted (1)' tab is active. It contains a 'Work Items' section on the left with a list of items, the first of which is '10.Enter\_the\_Application\_Data'. To the right of the list are fields for 'Specification' (assignment model updated (0.1)), 'Case' (10), 'Created' (Oct.:24, 2021 19:36:08), 'Task' (Enter the Application Data), 'Status' (Enabled), 'Age' (0:02:08:43), and 'Documentation'. On the far right are buttons: 'Offer', 'Allocate', 'Start', 'Secondary...', and a checkbox for 'Directly to me'.

Once logged In, the User needs to click on “**Admin Queues,**” where the loan application form will appear as “**Enter the Applicant Data.**” The Administrator can allocate the task by Clicking on Allocate button. (Refer Figure)

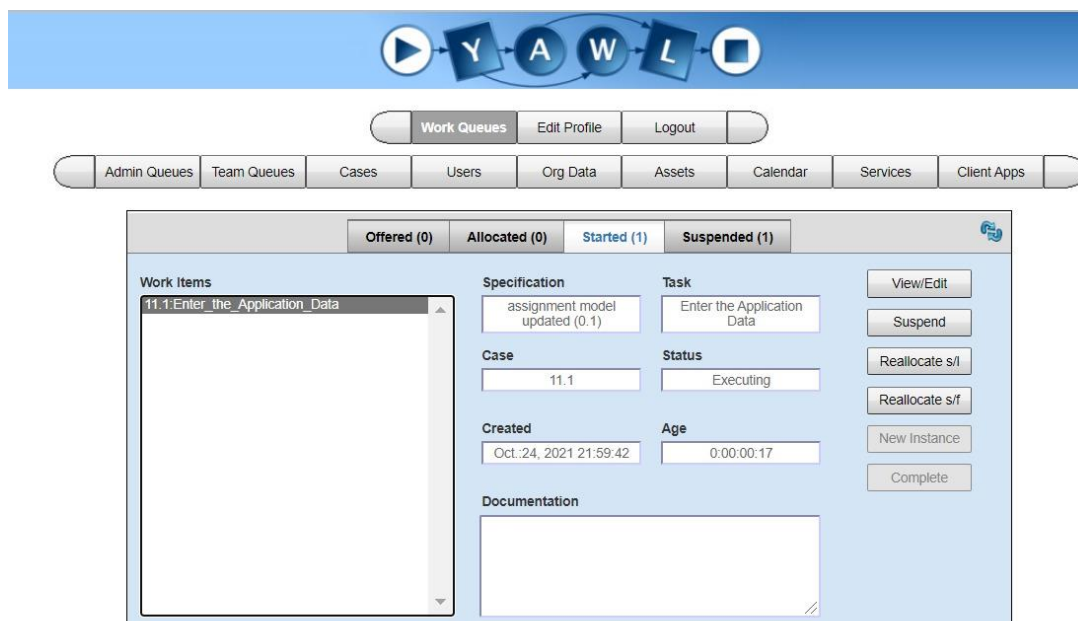
To proceed with the application, the user needs to: -

- a. Click on the task, i.e., Enter\_Applicant\_Data.
- b. Click on “**Start**”
- c. Select “**Work Queues.**”

The Administrator can allocate the task to the respective employee within the bank or assign it to himself by Clicking on “Directly to me.”

Once allocated, Logout the system and log in back to receive the assigned task.


### 3.3 Work Queues



In “**Work Queues,**” the task will be available in work items, " as shown in the figure.

- a. The user needs to click on “**Started.**”
- b. Select the task “**Enter the Application Data.**”
- c. Click on “**View/Edit.**”

### 3.4 Application Form



YAWL

Edit Work Item: 11.1

Enter the Application Data

LoanApplication

Title:

FirstName:

LastName:

DOB:

Email:

Phone:

StreetName:

StreetNumber:

City:

PinCode:

PreviousAddress

StreetName:

StreetNumber:

City:

PinCode:

CurrentEmployer:

MonthlyNetSalary:

CurrentEmployer:

MonthlyNetSalary:

OtherIncome

Type:

MonthlyNetIncome:

TotalMonthlyOutgoings:

ExcludingExistingLoan:

CreditCardRepayments:

BankAccounts

BankName:

TypeOfAccount:

AccountNumber:

CurrentCustomer:☐

PropertyInformation

TypeOfProperty:

PropertyAddress:

StreetName:

StreetNumber:

City:

PostCode:

LoanInformation

LoanAmount:

NumberOfMonths:

StartDate:

InterestRate:

CreditCardQuoteRequired

CreditRequired:☐

HomeInsuranceQuoteRequired

HomeInsuranceRequired:☐

LifeInsuranceQuoteRequired

LifeInsuranceRequired:☐

SubmissionDate:

Cancel

Save

Complete

- Enter all the Required Information of the Loan Applicant.
- Select the Insurance Package if the applicant has requested.
- Click on "**Save**" and "**Complete.**"



### 3.5 Check Completeness

LoanApplication

Title:Mr

FirstName:Joe

LastName:Smith

DOB:24/10/2021

Email:na@na.com

Phone:0412345678

StreetName:UNIT 601 , 212 margaret street oaks on margaret margaret street

StreetNumber:212

City:Brisbane

PinCode:251010

PreviousAddress

StreetName:UNIT 601 , 212 margaret street oaks on margaret margaret street

StreetNumber:212

City:Brisbane

PinCode:251010

CurrentEmployer:Vodafone

MonthlyNetSalary:4000

OtherIncome

Type:Crypto

MonthlyNetIncome:1000

TotalMonthlyOutgoings:2000

ExcludingExistingLoan:1000

CreditCardRepayments:1000

BankAccounts

BankName:Comm Bank

TypeOfAccount:Saving

AccountNumber:012345

CurrentCustomer:☒

LoanApplicationID:9697

AdministrationInformation

SubmissionDate:24/10/2021

RevisionDate:24/10/2021

Status:<-- Choose (optional) -->

Comments:

Eligibility:☐

After clicking the form “**Check for completeness,**” this will pop up with all pre-filled information from the user. Next, the loan officer will check if all the required data is filled correctly or not. Finally, based on that information, the loan officer will select the application status (Approved/Incomplete/canceled, etc.).

### 3.6 Loan Assessment



The next task available in Admin Queues is the Loan assessment that has two assessment checks, "**Credit History Check**" & "**Property Appraisal Check**."

This task will be allocated to "**Financial Officer**" and "**Property Valuer**" respectively.

To allocate the task.

- Click on "Allocate" and select the participant. The task will be allocated to the respective officers/participants.
- The Respective Officer Will Login using their ID and Password.
- The tasks will be available under the "Allocated tab" in "Work Queues."
- Click on the "first task" and press "start."
- Click on "Second task" and press "start."
- Click on "Work Queues," press "start," and click on "View/edit."

### 3.7 Property Appraisal Check



Edit Work Item: 14.7

**Credit History Check**  
LoanApplicationID:

**CurrentCreditInformation**

**LoanInFiveYears**

LoanType:

Amount:

DurationInYears:

OutstandingAmount:

MonthlyRepayments:

InterestRate:

**CreditCardInfo**

Provider:

CreditLimit:

OutstandingAmount:

MonthlyRepayments:

InterestRate:

**PublicRecordInformation**

CourtJudgementInformation:

**BankruptcyInformation**

DateRaised:

Current: ☐

**CreditAssessment**

Result:

The financial officer will be responsible for the “Credit Check” to check the eligibility for the application. In addition, the Financial officer will be accountable for the form to be completed. After completing the form, click “save” and “complete.”

### 3.8 Property Appraisal Check



Edit Work Item: 14.6

**Property Appraisal Check**  
**LoanApplicationID:**   
**PropertyAppraisal**  
**PropertyAppraiserIdentifier:**   
**SurroundingPropertiesValue1:**   
**SurroundingPropertiesValue2:**   
**SurroundingPropertiesValue3:**   
**EstimatedPropertyMarketValue:**   
**Comments:**

The Property Valuer is responsible for the task to be completed as per allocation. Therefore, the property appraisal officer needs to log in as a property appraisal officer with their credentials.

- Enter all the required details as asked in the form.
- Click “save” and “complete” after entering all the details.

### 3.9 Risk Assessment Form

Perform Risk Assessment	
<b>LoanApplication</b>	
Title:	Mr
FirstName:	Joe
LastName:	Smith
DOB:	17/10/2006
Email:	na@na.com
Phone:	0468796971
StreetName:	UNIT 601 , 212 margaret street oaks on margaret margaret street
StreetNumber:	12
City:	Brisbane
PinCode:	201010
<b>PreviousAddress</b>	
StreetName:	UNIT 601 , 212 margaret street oaks on margaret margaret street
StreetNumber:	212
City:	Brisbane
PinCode:	251010
CurrentEmployer:	Vodafone
MonthlyNetSalary:	4000
<b>OtherIncome</b>	
Type:	Crypto
MonthlyNetIncome:	1000
TotalMonthlyOutgoings:	2000
ExcludingExistingLoan:	1000
CreditCardRepayments:	1000
<b>BankAccounts</b>	
BankName:	Comm Bank
TypeOfAccount:	Saving
AccountNumber:	012345
CurrentCustomer:	<input type="checkbox"/>
<b>PropertyAppraisal</b>	
PropertyAppraiserIdentifier:	1000
SurroundingPropertiesValue1:	1000
SurroundingPropertiesValue2:	1000
SurroundingPropertiesValue3:	1000
EstimatedPropertyMarketValue:	5000

<b>PropertyAppraisal</b>	
PropertyAppraiserIdentifier:	1000
SurroundingPropertiesValue1:	1000
SurroundingPropertiesValue2:	1000
SurroundingPropertiesValue3:	1000
EstimatedPropertyMarketValue:	5000
Comments:	
<b>RiskAssessment</b>	
RiskWeight:	90
<b>CreditAssessment</b>	
Result:	AAA
<b>CurrentCreditInformation</b>	
<b>LoanInFiveYears</b>	
LoanType:	car loan
Amount:	1000
DurationInYears:	1
OutstandingAmount:	110
MonthlyRepayments:	100
InterestRate:	2
<b>CreditCardInfo</b>	
Provider:	nab
CreditLimit:	1000
OutstandingAmount:	0
MonthlyRepayments:	0
InterestRate:	0



CancelSaveComplete

The risk assessment form will appear with all pre-filled data and calculated **risk weightage**. The “**Risk weightage**” value that will appear on this form is through the automated process. The risk weightage value depends on previous checks that the user in previous forms filled.

### 3.10 Eligibility Check



Edit Work Item: 15.9

Eligibility Check	
RiskAssesment	
RiskWeight:	90
LoanApplicationID:	9697
AdministrationInformation	
SubmissionDate:	25/10/2021 
RevisionDate:	25/10/2021 
Status:	<-- Choose (optional) --> ▼
Comments:	
Eligibility:	<input type="checkbox"/>


Cancel

Save

Complete

- a. Eligibility check is the process where the loan officer will decide the status based on risk weightage and all other relevant information.
- b. The loan officer can cancel the application by selecting canceled/Rejected from the “**status**” tab.
- c. If the application is canceled, it will be archived in the database, and a notification will be sent to the applicant.

### 3.11 Acceptance Package



Edit Work Item: 15.10

Send Acceptance package

RepaymentSchedule

MonthlyRepaymentAmount: 245

NumberOfRepayment: 20

LoanApplication

Title: Mr

FirstName: Joe

LastName: Smith

DOB: 17/10/2006

Email: na@na.com

Phone: 0466796971

StreetName: UNIT 601 , 212 margaret street oaks on margaret margaret street

StreetNumber: 12

City: Brisbane

PinCode: 201010

PreviousAddress

StreetName: UNIT 601 , 212 margaret street oaks on margaret margaret street

StreetNumber: 212

City: Brisbane

PinCode: 251010

CurrentEmployer: Vodafone

MonthlyNetSalary: 4000

OtherIncome

Type: Crypto

MonthlyNetIncome: 1000

TotalMonthlyOutgoings: 2000

ExcludingExistingLoan: 1000

CreditCardRepayments: 1000

BankAccounts

BankName: Comm Bank

TypeOfAccount: Saving

AccountNumber: 012345

CurrentCustomer: ☐

LoanApplicationID: 9697

AdministrationInformation

SubmissionDate: 25/10/2021

RevisionDate: 25/10/2021

Status: Approved

Comments: ok report

Eligibility: ☐

CreditCardQuoteRequired

CreditRequired: ☒

HomeInsuranceQuoteRequired

HomeInsuranceRequired: ☒

LifeInsuranceQuoteRequired

LifeInsuranceRequired: ☒

Cancel

Save

Complete

The acceptance package form will have the value of “Monthly repayment amount” and “Number of repayments” that were calculated automatically.

This form will have the details for the Insurance package and the credit check. If the applicant applied for the insurance or credit check, an extra quote would be sent to the applicant.



### 3.12 Quotes

The screenshot displays the YAWL web application interface. At the top, there is a blue header bar with the YAWL logo (a sequence of icons: a play button, a blue square with 'Y', a blue circle with 'A', a blue square with 'W', a blue square with 'L', and a blue square with a play button). Below the header, there is a navigation bar with buttons for 'Work Queues', 'Edit Profile', and 'Logout'. A secondary navigation bar contains buttons for 'Admin Queues', 'Team Queues', 'Cases', 'Users', 'Org Data', 'Assets', 'Calendar', 'Services', and 'Client Apps'. The main content area is titled 'Unoffered (3)' and 'Worklisted (1)'. It features a 'Work Items' list on the left with three items: '15: Send Home Insurance Quote', '15: Send Life Insurance Quote', and '15: Send Credit Card Quote'. The '15: Send Home Insurance Quote' item is selected. To the right of the list, there are fields for 'Specification' (assignment model updated (0.1)), 'Case' (15), 'Created' (Oct.25, 2021 1:23:36), 'Task' (Send Home Insurance Quote), 'Status' (Enabled), 'Age' (0:00:00:01), and 'Documentation'. On the far right, there are buttons for 'Offer', 'Allocate', 'Start', and 'Secondary...'. A checkbox labeled 'Directly to me' is also present.

This screen will show all the other offers that the applicant selected. On this screen, all the accepted offers will appear in “Work Items.”

- “**Home Insurance Quote**” and “**Life Insurance Quote**” tasks should be allocated to the Insurance sales representative.
- The “**Credit card Quote**” task will be allocated to the financial officer.



### 3.12 Credit Card Quote



Edit Work Item: 17.11

**Send Credit Card Quote**

LoanApplicationID: 9697

**CreditCardQuote**  
CardLimit:   
FinanceOfficerName:   
NormalInterestRate:   
DiscountedInterestRate:

**CreditCardQuoteRequired**  
CreditRequired: ☒

- The “Financial officer” will fill this task, and this task will only prompt if the applicant has asked for the credit card.
- After completing all the details, the user needs to click “save” and “complete.”

### 3.13 Home Insurance



Edit Work Item: 15.11

**Send Home Insurance Quote**

LoanApplicationID: 9697

**HomeInsuranceQuoteRequired**  
HomeInsuranceRequired: ☒

**HomeInsuranceQuote**  
HomeInsuranceTotalCost:   
InsuranceSalesRepresentativeName:

- a. The “Insurance sales representative” is responsible for the home insurance task.
- b. This task will only prompt if the applicant asks for the home insurance with the application.
- c. The Insurance sales representative will fill the form and click “save” and “complete.”

### 3.14 Life Insurance



Edit Work Item: 15.12

**Send Life Insurance Quote**

LoanApplicationID:

**LifeInsuranceQuoteRequired**

LifeInsuranceRequired: ☒


**LifeInsuranceQuote**

LifeInsuranceTotalCost:

InsuranceSalesRepresentativeName:

- a. The “Insurance sales representative” is responsible for the life insurance task.
- b. This task will only prompt if the applicant asks for life insurance with the application.
- c. The Insurance sales representative will fill the form and click “save” and “complete.”

### 3.15 Verify Repayment Agreement



Y A W L

Edit Work Item: 17.14

**Verify repayment agreement**

LoanApplicationID:

**AgreementSummary**


ConditionsAgreed: ☒

RepaymentAgreed: ☒

Cancel Save Complete

- a. The loan officer will again assess this task to verify the repayment agreement conditions.
- b. The loan officer will check all the requirements to process the application.

### 3.16 Final Decision





## Edit Work Item: 17.15


### Final Decision

LoanApplicationID:

#### Administration Information

SubmissionDate:  

RevisionDate:  

Status:  

Comments:

Eligibility: ☒

#### Agreement Summary

ConditionsAgreed: ☐

RepaymentAgreed: ☐

MonthlyRepaymentAmount:

NumberOfMonths:

This is the final decision page that will come and after this the application will be achieved.