

# Moneris Online HS and Gowns Task Documentation

Note: MiraPay used the 'eigen' links, Moneris uses 'moneris' links

## Important Links:

Recommended Solution:

- <https://developer.moneris.com/Documentation/NA/E-Commerce%20Solutions/MCO/About%20Moneris%20Checkout>
- <https://github.com/Moneris/MRC-User-Guide-Canada>
- <https://github.com/Moneris/eCommerce-Canada-HostedSolutions>

Solutions:

- <https://developer.moneris.com/en/More/Getting%20Started/Feature%20Overview>

Hosted Solutions:

- <https://developer.moneris.com/Documentation/NA/E-Commerce%20Solutions/Hosted%20Solutions/Hosted%20Solution%20Configuration>

Hosted Paypage:

- <https://developer.moneris.com/en/More/Help/~/~/link.aspx? id=0E57826471DC480E8F377C79BB88D6CB& z=z>

Response Codes, CVD Result Codes, CAVV Result Codes:

- <https://developer.moneris.com/en/More/Help/~/~/link.aspx? id=E63D673AD4884EFD945506429503645E& z=z>
- <https://developer.moneris.com/en/More/Testing/CVD%20Result%20Codes>
- <https://developer.moneris.com/en/More/Testing/CAVV%20Result%20Codes>

Test and Live Production Merchant Resource Center Links:

- <https://esqa.moneris.com/mpg/index.php>
- <https://www3.moneris.com/mpg/index.php>

Test and Live Production Hosted Paypage Links:

- <https://esqa.moneris.com/HPPDP/index.php>
- <https://www3.moneris.com/HPPDP/index.php>

## Online HS

- VMs Used: #8 New OAS Production, VM-DB0 (*accounting* database location, *onlinetrans* table)
- File Location Root: #8 New OAS Production VM – C:\inetpub\wwwroot\
- Files Modified: *transfailed.cshtml*, *transsucceeded.cshtml*, *secure\createoutput.cshtml*

NOTE: The previous 3 MiraPay-related files were saved as copies with “-mirapay” suffix.

NOTE: Ask Altaf for login information for the merchant resource center gateway portals

*createoutput.cshtml* changes:

- Links for dev test and production hosted paypage were changed to Moneris
- Removed the fields and code related to the MiraPay request, replacing it with the ones for Moneris (see the hidden inputs which transfer the data for the request to the hosted paypage)
  - The plan amount(s) are sent as rvars in the request
  - The charge\_total must be 2 decimal places exactly (unlike MiraPay)

*transfailed.cshtml* changes:

- Created better handling, where failures (declines, etc) and cancellations are handled differently, as well as problems/errors (these are handled same as before)
  - MiraPay didn't display any receipt info for failed or cancelled transactions
- Failed transactions have the same receipt info data as a success (full display like a successful/approved transaction); however, cancelled transactions only have a (name, date/time, email, customer/uog ID; total amount, trans order ID, response code – message)

*transsucceeded.cshtml* (& *transfailed.cshtml*) changes:

- Improved some of the English text messages
- Both display receipts were changed appropriately to use the returned fields from Moneris instead of those from MiraPay
  - Thus, variable names were changed to use the new ones and some different things (like calculations) may have to be done instead
  - This applies for display purposes and database operations
  - For instance, have to extract the English text message from the returned message value
- See Moneris documentation and code for field names and what they mean, as well as full display information of receipt data

Flow Changes:

- *createoutput.cshtml* prepares necessary data for the transaction from the forms on our Online HS website – which are then sent to the hosted paypage in the hidden input fields.
- Redirected to Moneris hosted paypage where user enters cardholder name, credit card number, card expiry date, and card security code (for Visa or Mastercard).

- Cancelling the transaction at this point will redirect to our *transfailed.cshtml*, as well as any failed (eg. declined) transaction – displaying our appropriate receipt info for either result
- Successful approved transactions will redirect to our *transsucceeded.cshtml*, where our receipt info is displayed in full
- Moneris will send an email to the user for successful and failed transactions besides our redirected receipt page
- NOTE: for both pages *transfailed.cshtml* & *transsucceeded.cshtml*, the result from the Moneris hosted paypage is a GET to our system (just like MiraPay), so you can see all the resulting values in the URL as query values.

## Online HS Screenshots:

### Hosted Paypage Process Flow

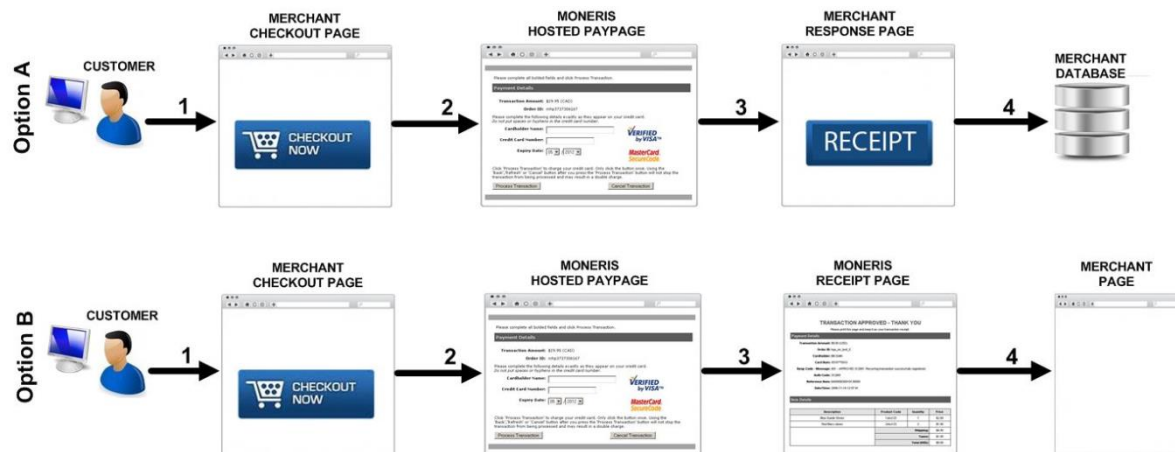


Figure 1: Moneris Hosted PayPage Process Flow - Online HS uses Option A

Online Account Services - Hosp... Online Account Services - Hosp... Online Account Services - Hosp... MiraPay - Secure Credit Card P...

www.3eigendev.com/mirapay/secure\_credit.php

Apps Adobe Acrobat All L... GypMail Moneris Sales and Solicitatio... Online Account Ser... Employee Self-Serv...

**MiraPay™** Secure Credit Card Payment

Cards Accepted

Merchant Name  
HOSPITALITY SERVICES, UNIVERSITY OF GUELPH Language English

Click Here to view Merchant Information.

Terms & Conditions

Total Amount: CAD \$1.00

Email Address\*: mvanbrae@uoguelph.ca

Street Address (optional):

Credit Card Number\*:

Expiry Date (MM/YY)\*:

CVV/CVCID \* (What's this):

Please verify your Credit Card information before proceeding.  
Your credit card will be charged after clicking "Complete Payment"

Complete Payment Cancel

Copyright © (2015 - 2020) Eigna Development Ltd. All Rights Reserved. Terms of Use & Privacy Policy

Figure 2: MiraPay Hosted Paypage

## Transaction Approved

Thank you. Your Transaction has been approved. You may now log off from online services.

**Name:** Mitchell Van Braeckel

**Amount:** 1.00

**Date:** 06/25/2020

**Transaction ID:** 376208

Please record the Transaction ID for future reference.

Note that it can take up to 5 minutes for the deposit to show up on your online account balance.

Figure 3: MiraPay Approved Transaction Receipt Merchant-Side Handling

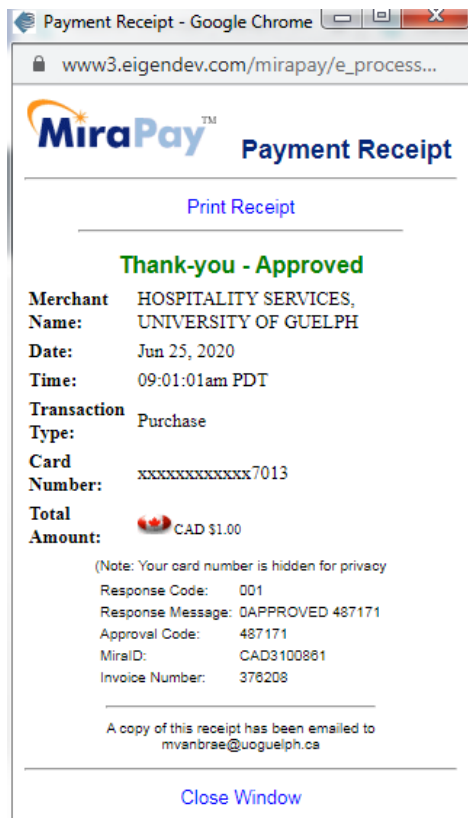


Figure 4: MiraPay Approved Payment Receipt

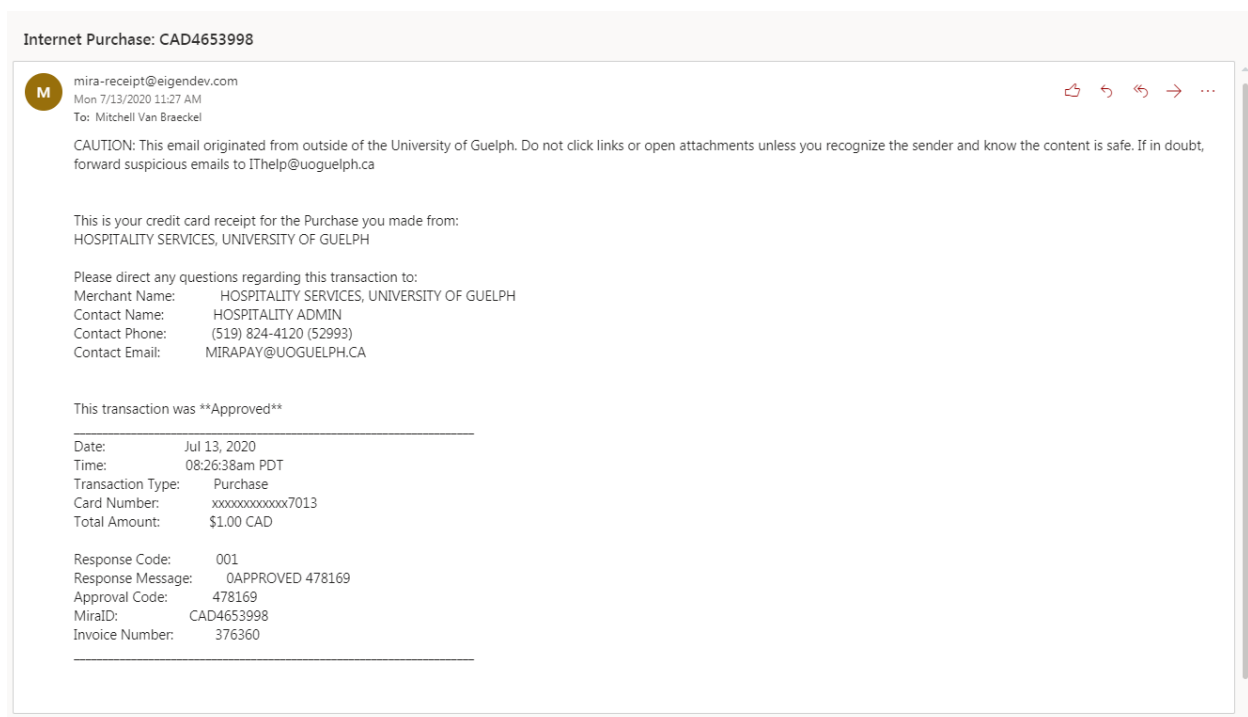


Figure 5: MiraPay Automated Email Receipt to User (only sends for approved transactions)

Online Account Services - Hosp... Online Account Services - Hosp... Online Account Services - Hosp... HOSPITALITY SERVICES - ON - 3/1/2020

www3.moneris.com/HPPDP/index.php

Apps Adobe Acrobat All... GryphMail Moneris Sales and Solicitatio... Online Account Ser... Employee Self-Servi...

### HOSPITALITY SERVICES - ON

Mandatory fields marked by \*

**Customer Details**

Customer ID: [REDACTED]

Email Address: mvanbrae@uoguelph.ca

Note: Please enter your Visa or Mastercard credit information.

**Payment Details**

Transaction Amount: \$1.00 (CAD)

Order ID: 376470

Please complete the following details exactly as they appear on your card. Do not put spaces or hyphens in the card number.

Cardholder Name: [REDACTED]

Card Number: [REDACTED]

Expiry Date (MMYY): [REDACTED]

Card Security Code: [REDACTED]

Click "Process Transaction" to charge your card. Only click the button once. Using the "Back", "Refresh" or "Cancel" button after you press the "Process Transaction" button will not stop the transaction from being processed and may result in a double charge.

[Process Transaction](#) [Cancel Transaction](#)

Figure 6: Moneris Hosted Paypage

Online Account Services - Hosp... Online Account Services - Hosp... Online Account Services - Hosp... +

onlineservices.hospitality.uoguelph.ca/transactionapproved.html?response\_order\_id=376470&date\_stamp=2020-07-20&time\_stamp=12%253A08%253A32&bank\_transaction\_id=6651342000100110&charge\_total=2.00&bank\_approval\_code=4854300re...

Apps Adobe Acrobat All... GryphMail Moneris Sales and Solicitatio... Online Account Ser... Employee Self-Servi...

## Online Services

### Hospitality Services

Classroom Level Improving Lives

You are currently signed in as mvanbrae (staff) | [Sign Out](#)

Home	<b>Transaction Approved</b>
Staff Home	Thank you. Your transaction has been approved.
View Account	<b>Name:</b> Mitchell Van Braeckel
Balance/History	<b>Date / Time:</b> 2020-07-20 12:08:32
View Statement	<b>Email Address:</b> mvanbrae@uoguelph.ca
Make Personal Payment	<b>Customer ID / UoG ID:</b> [REDACTED]
Make Departmental Payment	<b>Transaction Type:</b> PURCHASE
Request Statement	<b>Total Amount:</b> \$2.00 (CAD)
Change Address	<b>Transaction Order ID:</b> 376474
Cancel Account	<b>Cardholder:</b> MITCHELL H BRAECKEL
Plan Description	<b>Card Number:</b> *****7013
Card Holder Agreement	<b>Card Type:</b> VISA
Lost Card	<b>Response Code - Message:</b> 027 - APPROVED * =
Contact Us	<b>CVD Result Code:</b> Match
	<b>CAVV Result Code:</b> 2
	<b>Reference Number:</b> 6651342000100110
	<b>Auth Code:</b> 485430
	Please print this page and keep it as your transaction receipt.
	Note that it can take up to 5 minutes for the transaction to process and for the deposit to show up on your online account balance.

© 2019 Hospitality Services

Figure 7: Moneris Approved Transaction Receipt Merchant-Side Handling

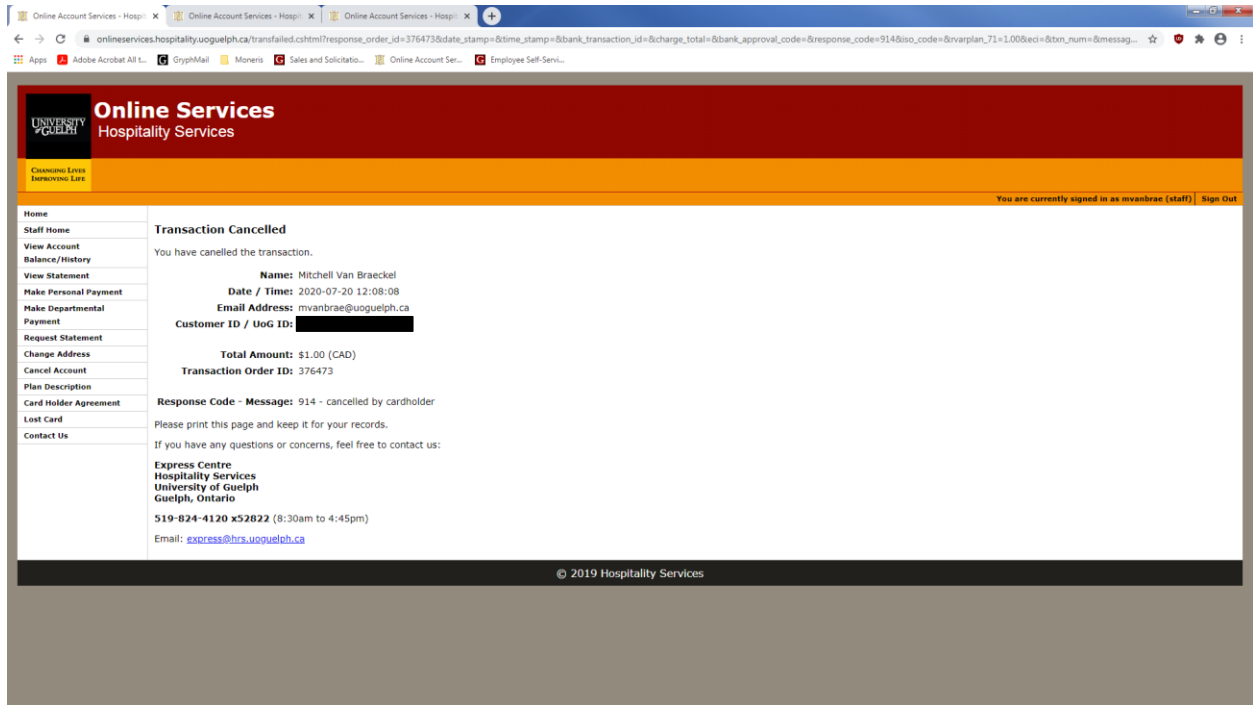


Figure 8: Moneris Cancelled Transaction Receipt Merchant-Side Handling

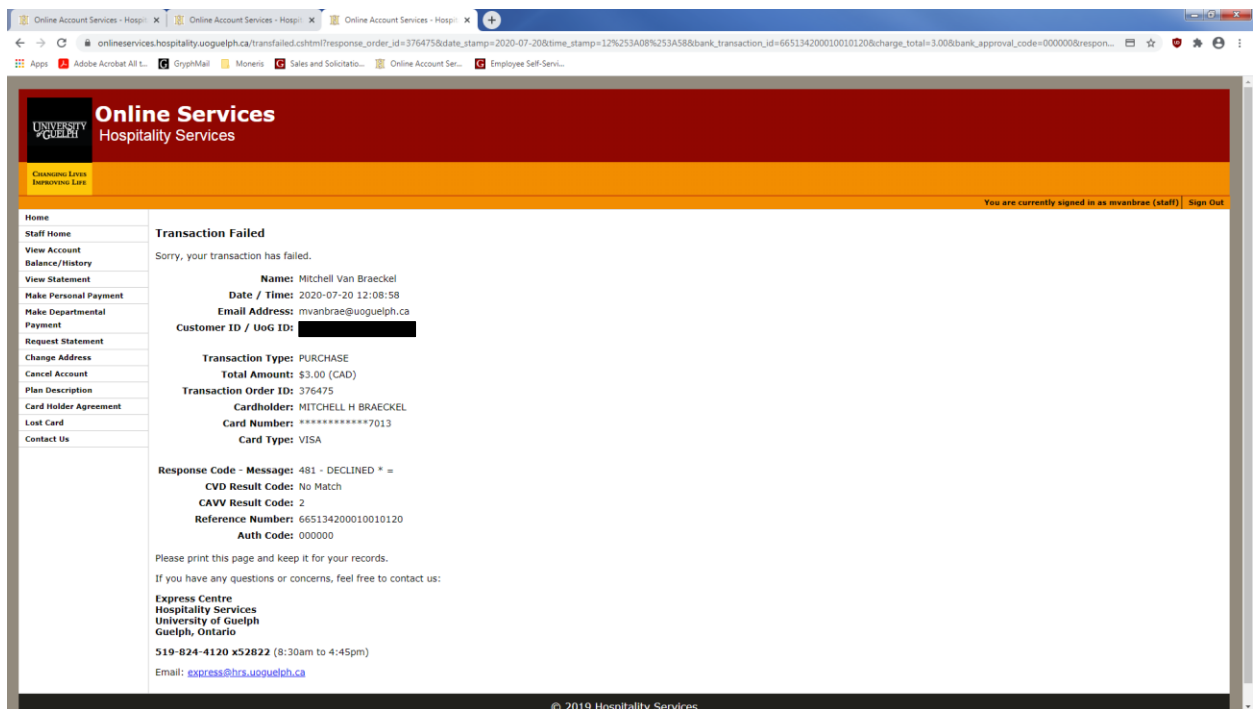



Figure 9: Moneris Failed Transaction Receipt Merchant-Side Handling

Transaction Receipt - Do Not Reply

 HOSPITALITY SERVICES - ON <esp\_receipt@moneris.com>  
Mon 7/20/2020 12:08 PM  
To: Mitchell Van Braeckel

**CAUTION:** This email originated from outside of the University of Guelph. Do not click links or open attachments unless you recognize the sender and know the content is safe. If in doubt, forward suspicious emails to [IThelp@uoguelph.ca](mailto:IThelp@uoguelph.ca)

**HOSPITALITY SERVICES - ON**

**TRANSACTION APPROVED - THANK YOU**

**PAYMENT DETAILS**

TYPE	PURCHASE
DATE	2020-07-20 12:08:32
ORDER ID	376474
AMOUNT(CAD)	\$2.00
CARDHOLDER	MITCHELL H BRAECKEL
CARD NUM	**** * 7013
ACCOUNT	VISA
REF NUM	665134200010010110
AUTH CODE	485430


**CUSTOMER DETAILS**

CUST ID	[REDACTED]
EMAIL	<a href="mailto:mvanbrae@uoguelph.ca">mvanbrae@uoguelph.ca</a>
NOTE	Please enter your Visa or Mastercard credit information.

Please keep this email as your transaction receipt.  
This receipt has been sent from an unmonitored email account.  
Do not reply to this email.

Figure 10: Moneris Automated Approved Transaction Email Receipt (successful transactions)

Transaction Receipt - Do Not Reply

 HOSPITALITY SERVICES - ON <esp\_receipt@moneris.com>  
Mon 7/20/2020 12:09 PM  
To: Mitchell Van Braeckel

**CAUTION:** This email originated from outside of the University of Guelph. Do not click links or open attachments unless you recognize the sender and know the content is safe. If in doubt, forward suspicious emails to [IThelp@uoguelph.ca](mailto:IThelp@uoguelph.ca)

**HOSPITALITY SERVICES - ON**

**DECLINED - TRANSACTION NOT APPROVED**

**PAYMENT DETAILS**

TYPE	PURCHASE
DATE	2020-07-20 12:08:58
ORDER ID	376475
AMOUNT(CAD)	\$3.00
CARDHOLDER	MITCHELL H BRAECKEL
CARD NUM	**** * 7013
ACCOUNT	VISA
REF NUM	665134200010010120

**CUSTOMER DETAILS**

CUST ID	[REDACTED]
EMAIL	<a href="mailto:mvanbrae@uoguelph.ca">mvanbrae@uoguelph.ca</a>
NOTE	Please enter your Visa or Mastercard credit information.

Please keep this email as your transaction receipt.  
This receipt has been sent from an unmonitored email account.  
Do not reply to this email.

Figure 11: Moneris Automated Failed Transaction Email Receipt (failed transactions only, excluding cancelled transactions)

## Gowns Ordering

- VMs Used: VM-HBA (codebase, & database location for gownorderactivity SQL)
- File Location Root: C:\inetpub\copy2\GownOrdersUpdate\
- Files Modified: ConfirmPage.aspx + ConfirmPage.aspx.cs, order\_failure.aspx + order\_failure.aspx.cs, order\_success.aspx + order\_success.aspx.cs, rent\_confirm.aspx.exclude + rent\_confirm.aspx.cs.exclude, RentSubmitToPG.aspx + RentSubmitToPG.aspx.cs, Web.config, App\_Code\Utility.cs, Account\OrderManualResult.aspx + Account\OrderManualResult.aspx.cs, Account\OrderManualStep2Cash.aspx.cs, Account\OrderManualStep2CC.aspx + Account\OrderManualStep2CC.aspx.cs

### Notes:

- .aspx & .aspx.cs files come in pairs, where .aspx files have the frontend code and .aspx.cs files have the backend code
- Ask Altaf for login information for the merchant resource center gateway portals. There are 2 configurations here: one for each flow mentioned below.
- The best way to look at these changes is to look at the files themselves because there is very thorough internal documentation detailing what each thing does (I've dramatically improved the internal documentation within each code file, including standard comments, function comments, and file comments, for the files above that I primarily worked). For general flow, you can refer to this document.
- This also uses Moneris Hosted Paypage solution Option A, and uses GET (like MiraPay implementation)
- ConfirmPage.aspx + ConfirmPage.aspx.cs, & Account\OrderManualStep2Cash.aspx.cs only had text changes

For this system, there are 2 flows: manual admin order (via admin login) & standard user order (via WebAdvisor). Web.config contains configuration values and info, whereas App\_Code\Utility.cs contains many functions used as utility throughout the system. The main change in Utility was the function to get the payment gateway portal (now uses Moneris values instead of MiraPay/Eigen values).

## Standard User Order via WebAdvisor

### Moneris Flow:

- User is redirected from WebAdvisor to gown order, fills out info and creates an order
  - Webadvisor etc. info, to then confirming info and filling in more stuff
- Files used in order:
  - rent\_confirm.aspx.exclude + rent\_confirm.aspx.cs.exclude OR RentSubmitToPG.aspx + RentSubmitToPG.aspx.cs, to collect, confirm, and send data as request to Moneris
  - Goes to Moneris Hosted Paypage
  - Success redirect back to order\_success.aspx + order\_success.aspx.cs
  - Failures (and Cancellations) redirected back to order\_failure.aspx + order\_failure.aspx.cs

## Manual Admin Order via Admin Login

### Moneris Flow:

- Admin user logs into the admin gown ordering system, fills out info and creates a manual order
  - They use Account\OrderManualStep1.aspx + Account\OrderManualStep1.aspx.cs, to manually fill out all necessary info for the order, then create the order and choose to pay with credit card
- Files used in order:
  - Account\OrderManualStep2CC.aspx + Account\OrderManualStep2CC.aspx.cs, collect, confirm, and send data as request to Moneris
  - Goes to Moneris Hosted Paypage
  - No matter the result of the transaction (success, failed, cancelled), it redirects back to Account\OrderManualResult.aspx + Account\OrderManualResult.aspx.cs

NOTE: For both flows, Moneris will send an automated email for both successful and failed transactions to the user, besides our receipt info display page. For successful transactions, we also send a custom email containing gown/convocation ceremony important information, including a copy of the transaction receipt info at the bottom.

NOTE: At least for manual admin order flow, the process is done in a pop-up browser window, and there are links displayed for creating another order or trying to order again if it fails (please be careful of sessions etc. when working on this)

Web config values were altered as necessary to use Moneris instead of MiraPay. This includes both Moneris configurations (one for each flow: manual vs normal). The utility function to determine the gateway portal to MiraPay was changed to Moneris too.

As appropriate, the prep files that contain the hidden inputs (before going to Moneris) had to be altered to use Moneris fields instead of MiraPay, including any handling done in the backend, including gown order activity updates.

The biggest changes related to the redirect return pages (from Moneris). Here, I refactored quite a bit in order to attempt some modularization for the future. I create multiple functions that were used in each file. Also, the actual displays for receipt info were greatly improved to provide more information about the transaction. This applies for successful (approved), failed (eg. declined), cancelled, and problem/error transactions.

## Gown Order Screenshots:

U of Guelph Hospitality Services - Purchase Tickets - Google Chrome

Not secure | gown.hospitality.uoguelph.ca/Account/OrderManualStep1.aspx

### Purchase Tickets

Purchase Information

Name of Wearer: Mitchell Van Braeckel

Student No: [REDACTED]

Email: mvanbrae@uoguelph.ca

Degree: Bachelor of Computing

Graduation Year: 2022

Convocation Date: 8/8/2022 (mm-dd-yyyy)

Convocation Time: 09:00AM

Gown Rental: Yes

No of Tickets: 2

Payment Method: Credit Card

Cancel Next >>

Figure 12: Manual Admin Order Step 1 - Filling in Info

U of Guelph Hospitality Services - Purchase Tickets - Mozilla Firefox

gown.hospitality.uoguelph.ca/Account/OrderManualStep2CC.aspx

Confirm your Information

Name of Wearer:	Mitchell Van Braeckel
Student No:	
Email:	mvanbrae@uoguelph.ca
Height:	inches
Degree:	Bachelor
Field:	Computing
Graduation Year:	2022
Convocation Date:	8/8/2022
Convocation Time:	09:00AM

---

No of Tickets:	2
Ticket Cost:	\$50.00
Gown Rental Due:	\$25.00
HST:	\$9.75

---

Total Order Amount:	<b>\$84.75</b>
---------------------	----------------

---

Payment Method:	Credit Card
-----------------	-------------

[\[Change Information\]](#)

Hospitality Services - University of Guelph

Figure 13: Manual Admin Order Step 2 - Credit Card Payment Confirmation (submitting goes to Moneris)

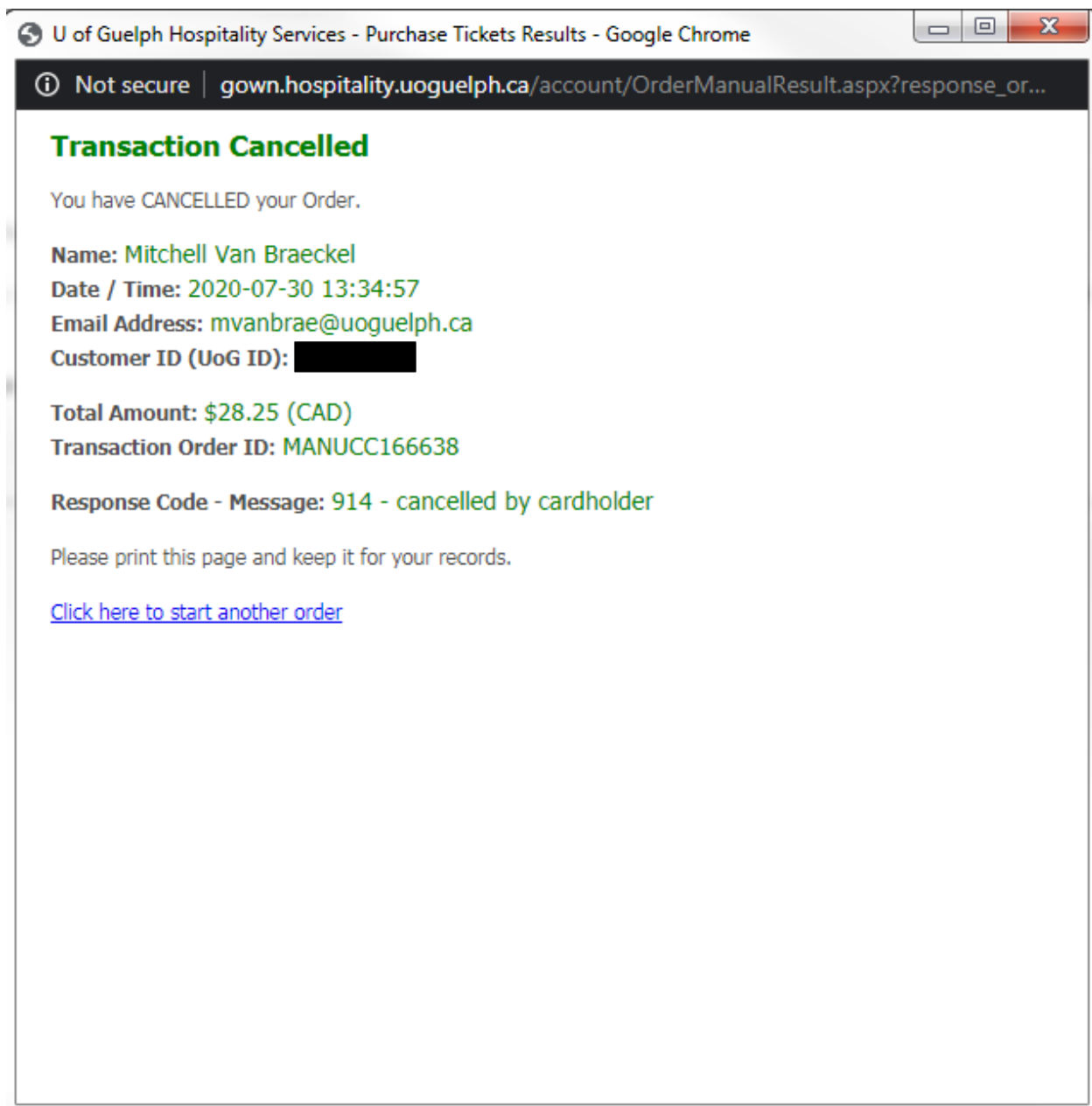


Figure 14: Moneris Cancelled Transaction Receipt Info Merchant-Side Handling

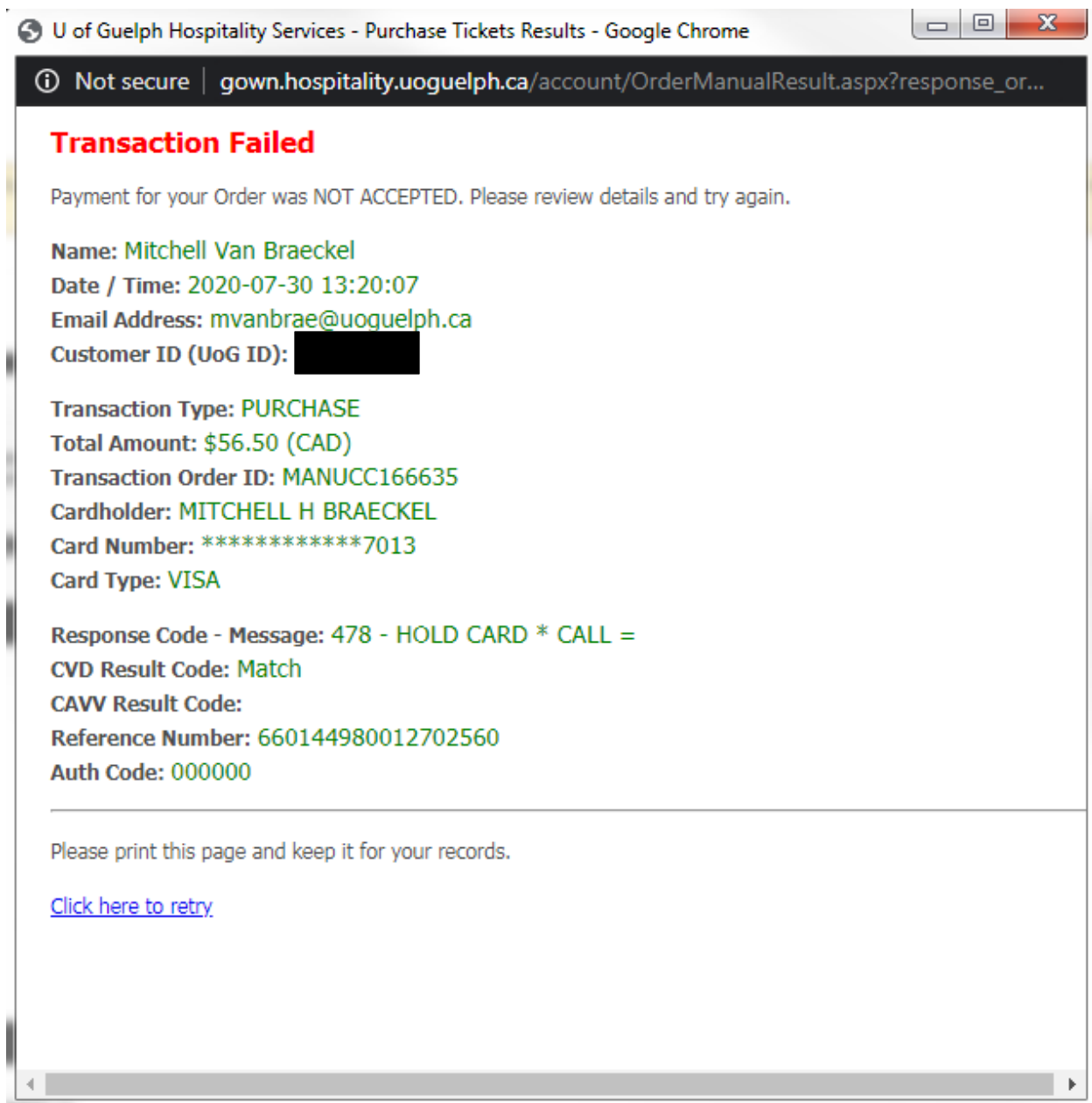


Figure 15: Moneris Failed Transaction Receipt Info Merchant-Side Handling

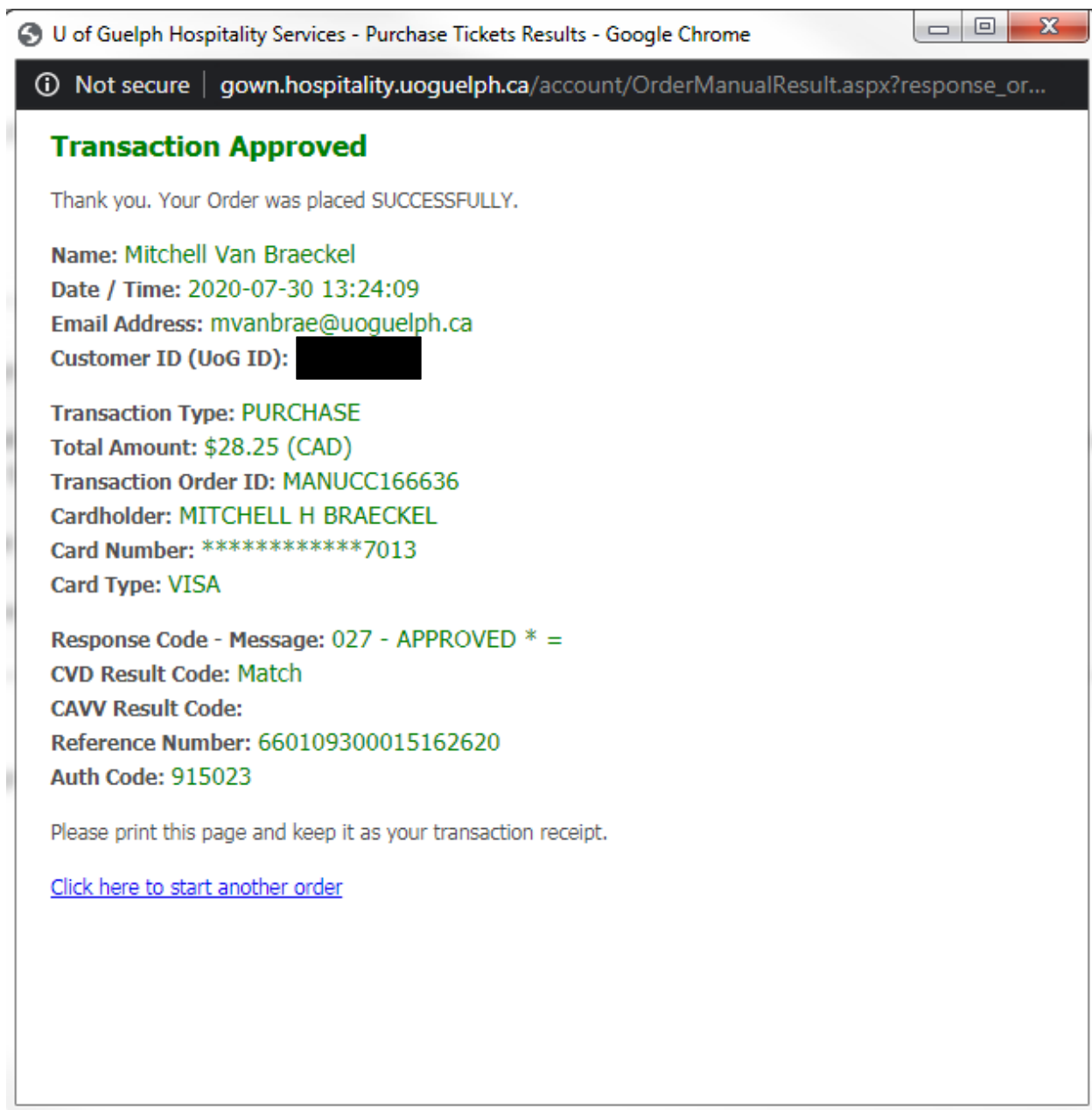


Figure 16: Moneris Approved Transaction Receipt Info Merchant-Side Handling

#### Your Gown Rental and Convocation Ticket Order

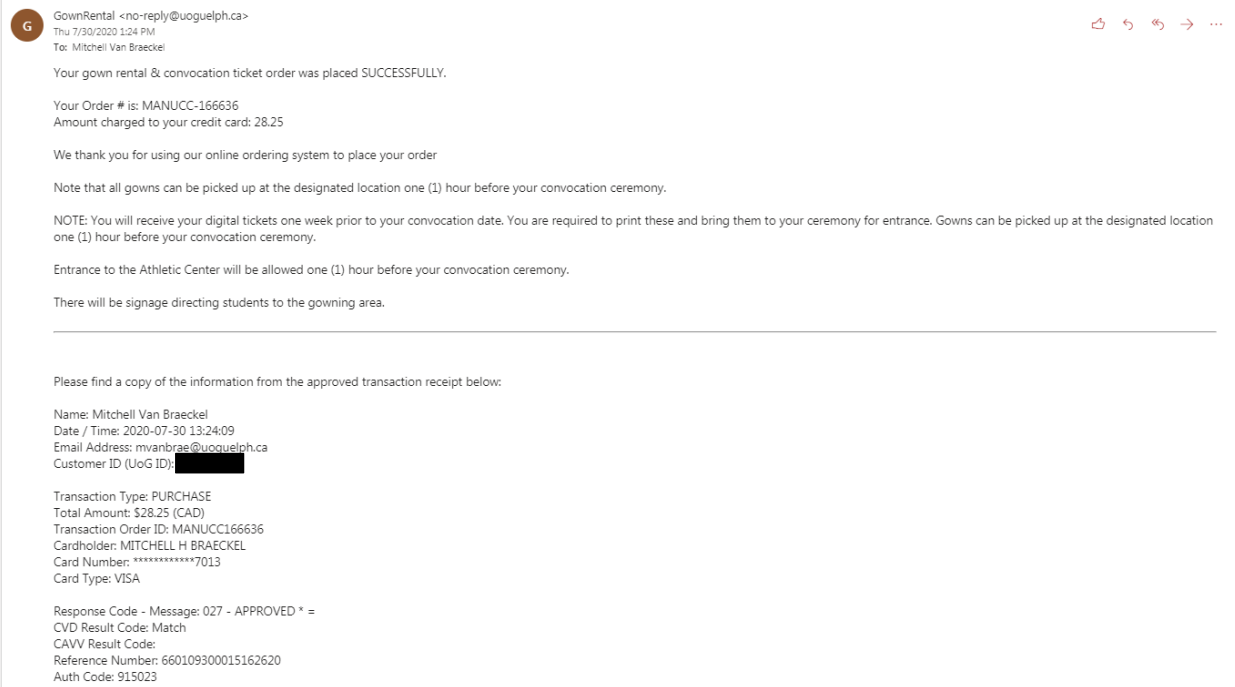


Figure 17: Our Custom Email Sent to User for Successful Transaction

#### Gowns Links:

- <http://gown.hospitality.uoguelph.ca/Account/login.aspx> (Current Orders, [New Ticket Order])
- <http://gown.hospitality.uoguelph.ca/Account/OrderManualStep1.aspx> [Next>>]
- <http://gown.hospitality.uoguelph.ca/Account/OrderManualStep2CC.aspx> [Submit Order & Make Payment]
- Goes to Hosted Paypage, then Returns to the appropriate Merchant page after transaction, which is dependent on manual or normal usage flow.