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:

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

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.

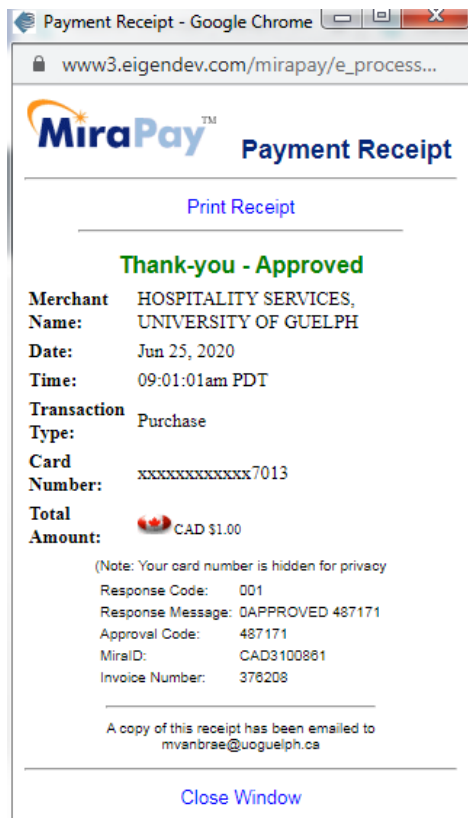Figure 3: MiraPay Approved Transaction Receipt Merchant-Side Handling

Figure 4: MiraPay Approved Payment Receipt
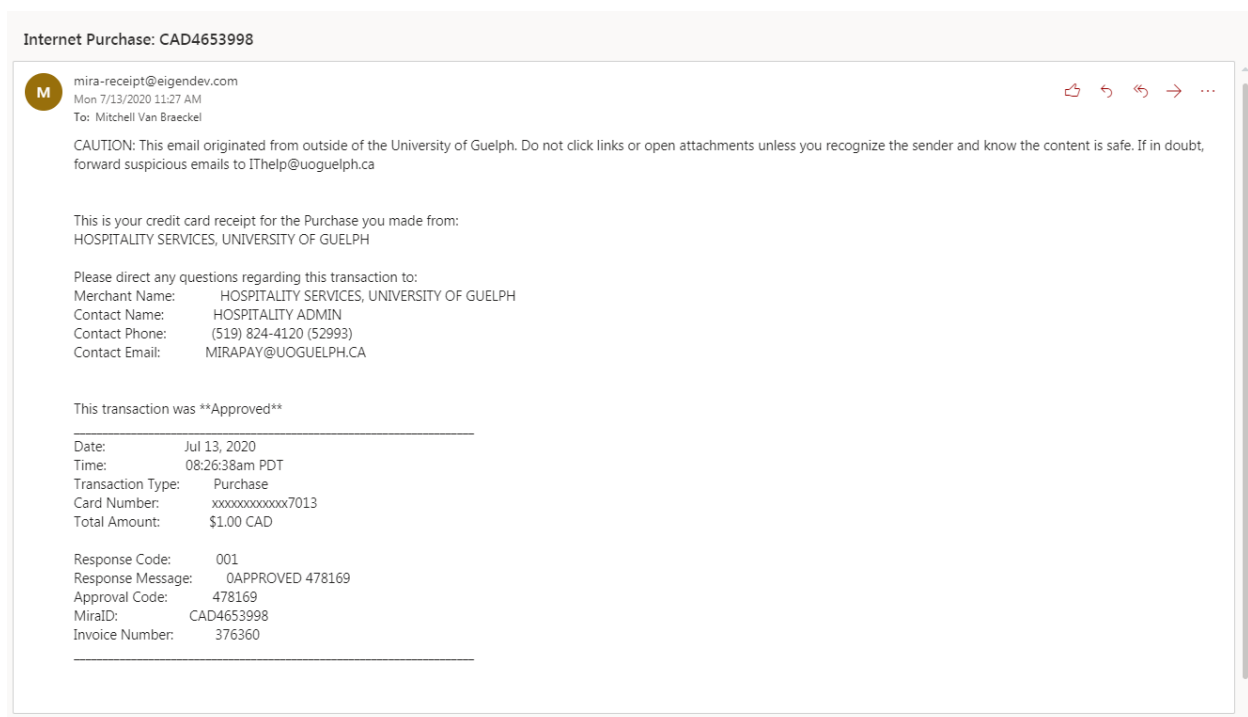
Figure 5: MiraPay Automated Email Receipt to User (only sends for approved transactions)

Figure 6: Moneris Hosted Paypage

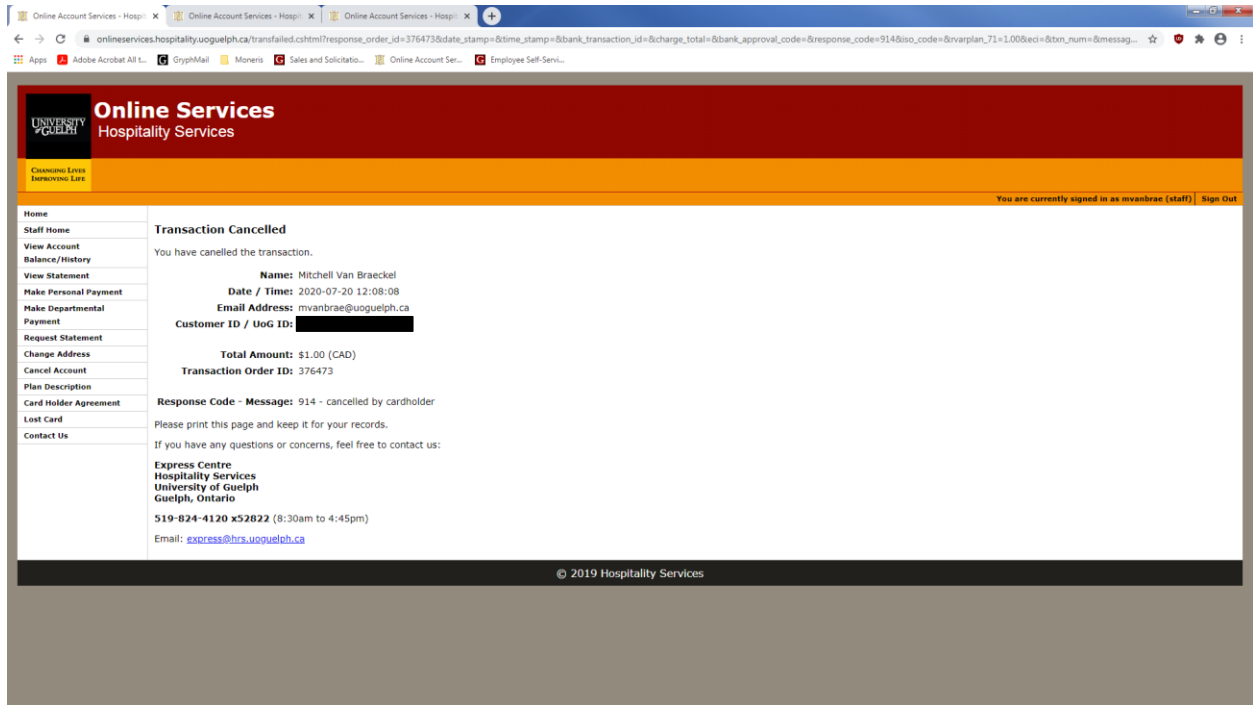*Figure 7: Moneris Approved Transaction Receipt Merchant-Side Handling*

Figure 8: Moneris Cancelled Transaction Receipt Merchant-Side Handling
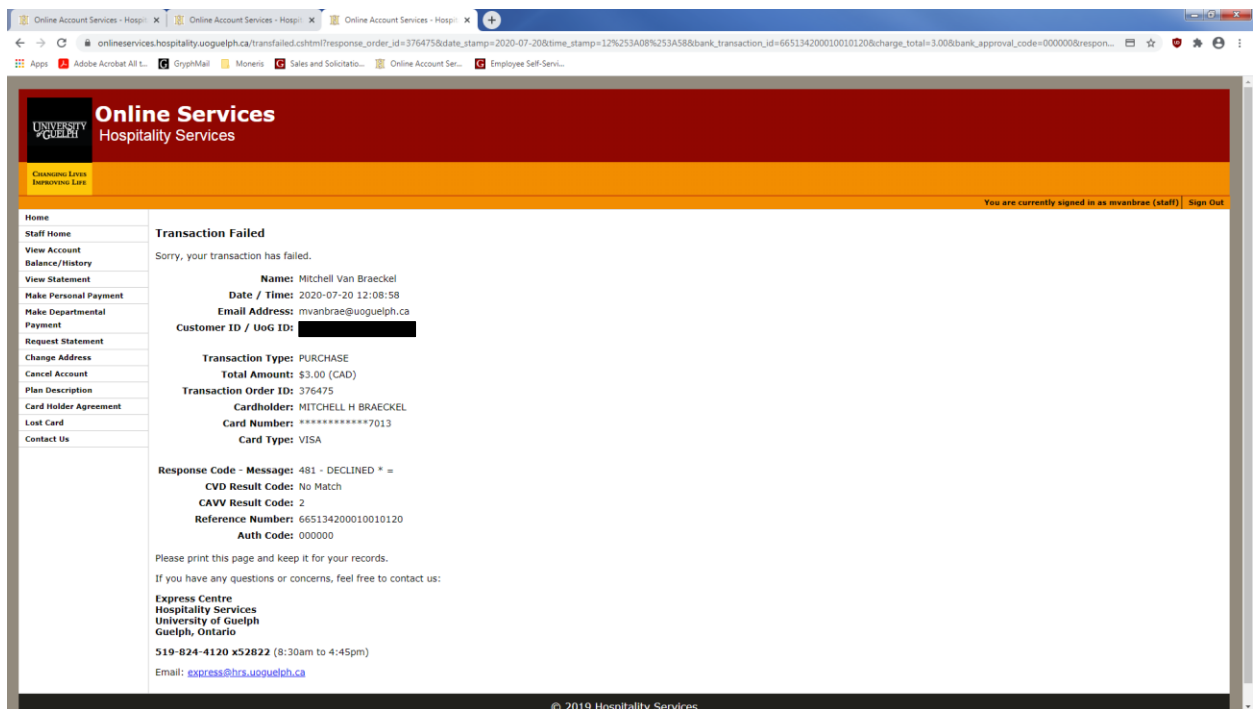

Figure 9: Moneris Failed Transaction Receipt Merchant-Side Handling

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

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	
EMAIL	mvanbrae@uoguelph.ca
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

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	
EMAIL	mvanbrae@uoguelph.ca
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 gownorderactivty 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:

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

Figure 13: Manual Admin Order Step 2 - Credit Card Payment Confirmation (submitting goes to Moneris)
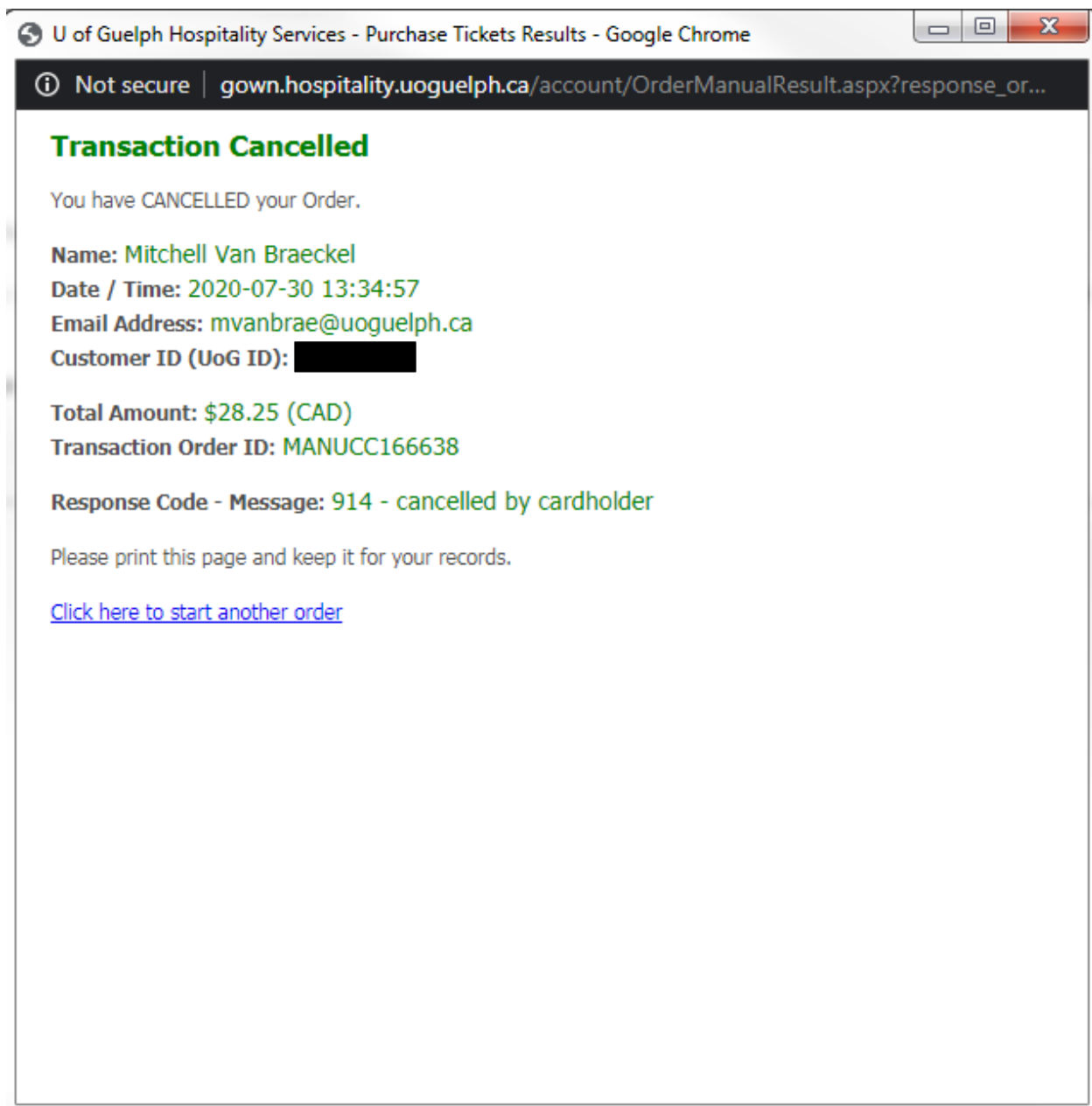
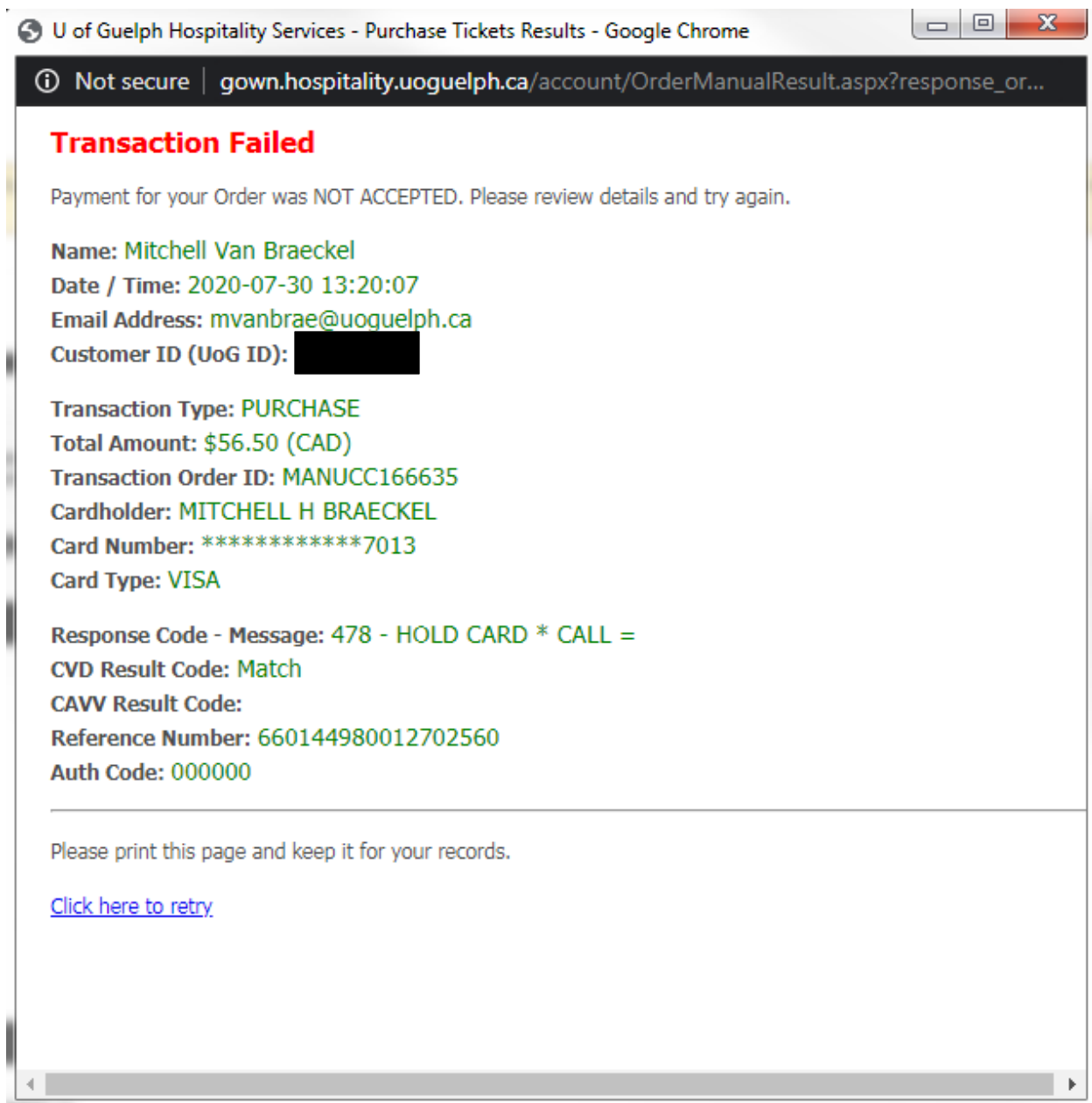*Figure 14: Moneris Cancelled Transaction Receipt Info Merchant-Side Handling*

Figure 15: Moneris Failed Transaction Receipt Info Merchant-Side Handling
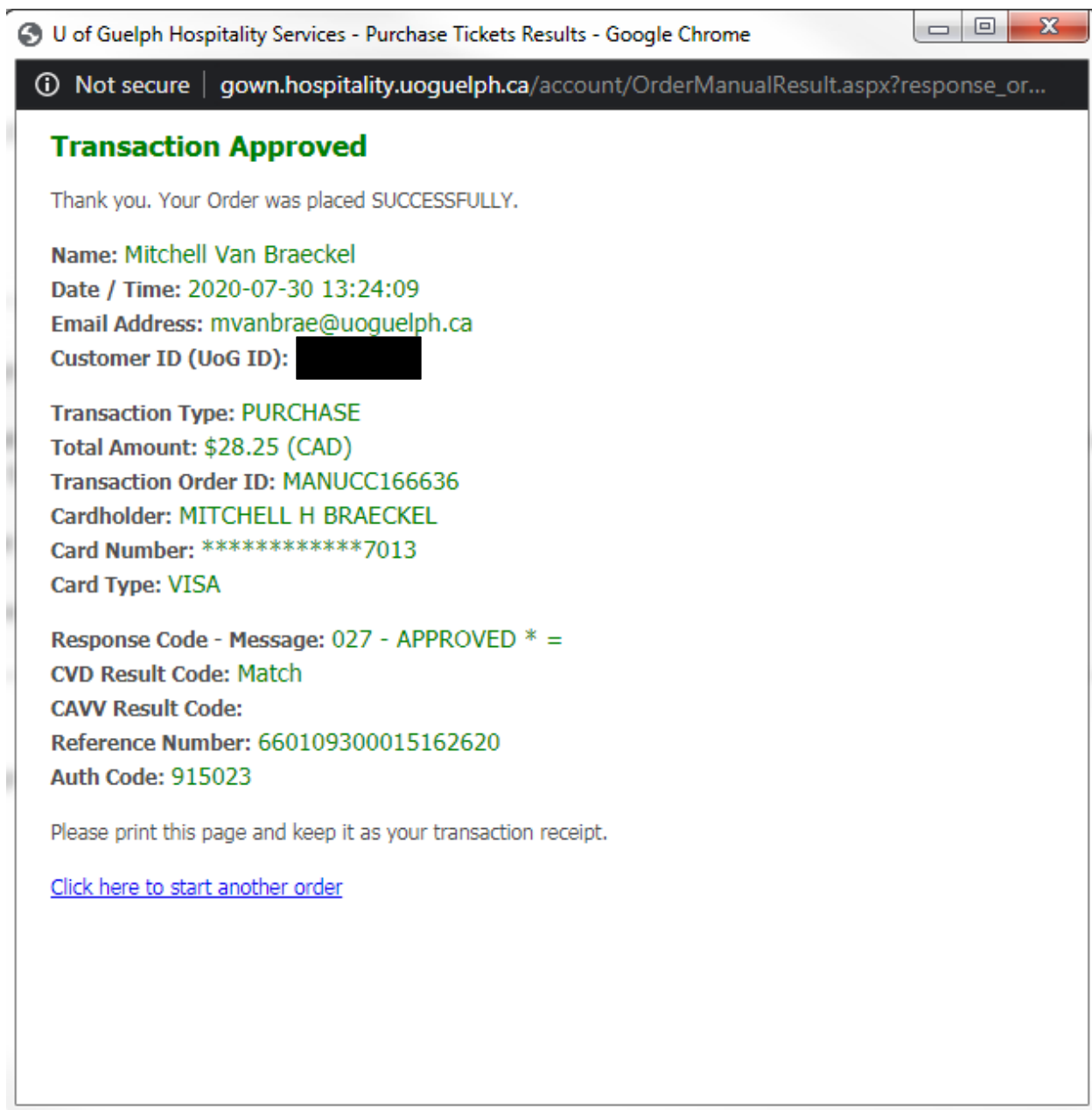
U of Guelph Hospitality Services - Purchase Tickets Results - Google Chrome

ⓘ Not secure | gown.hospitality.uoguelph.ca/account/OrderManualResult.aspx?response_or...

Transaction Approved

Thank you. Your Order was placed SUCCESSFULLY.

Name: Mitchell Van Braeckel
Date / Time: 2020-07-30 13:24:09
Email Address: mvanbrae@uoguelph.ca
Customer ID (UoG ID): ▮▮▮▮▮

Transaction Type: PURCHASE
Total Amount: $28.25 (CAD)
Transaction Order ID: MANUCC166636
Cardholder: MITCHELL H BRAECKEL
Card Number: ************7013
Card Type: VISA

Response Code - Message: 027 - APPROVED * =
CVD Result Code: Match
CAVV Result Code:
Reference Number: 660109300015162620
Auth Code: 915023

Please print this page and keep it as your transaction receipt.

Click here to start another order

Figure 16: Moneris Approved Transaction Receipt Info Merchant-Side Handling
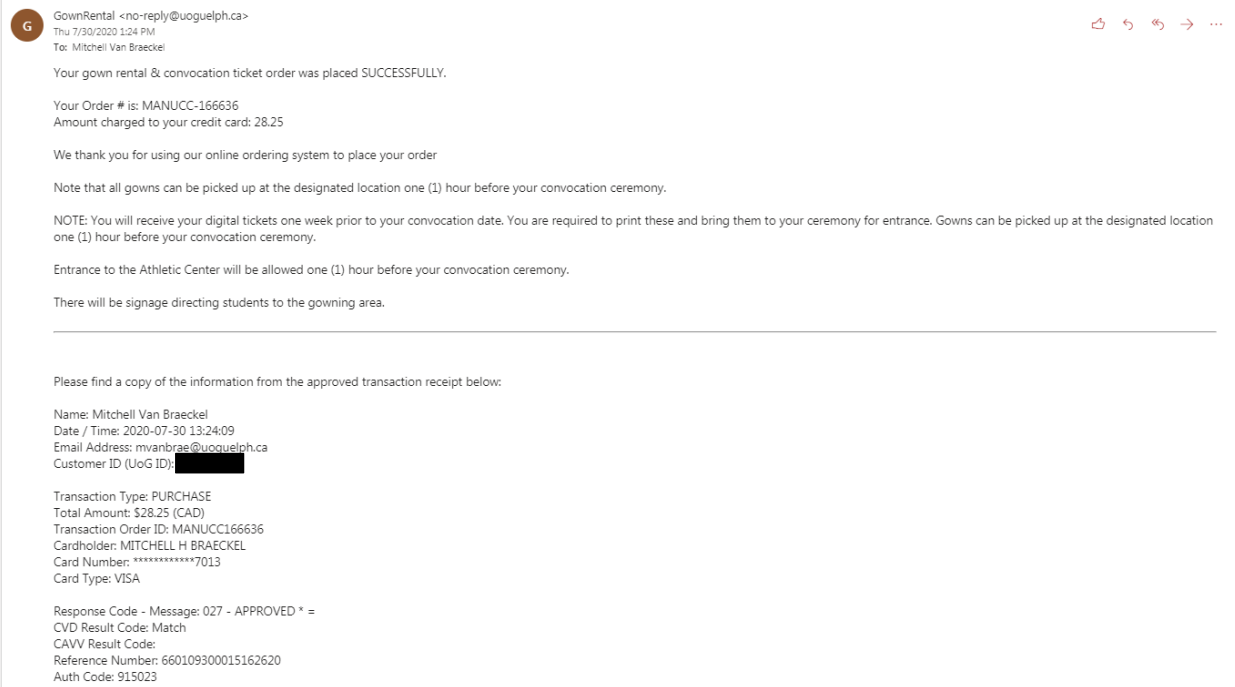
Figure 17: Our Custom Email Sent to User for Successful Transaction

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.