

GROUP PROJECT DIGITALIZATION OF BUSINESS PROCESSES CASE: MEDICAL HEALTH INSURANCE



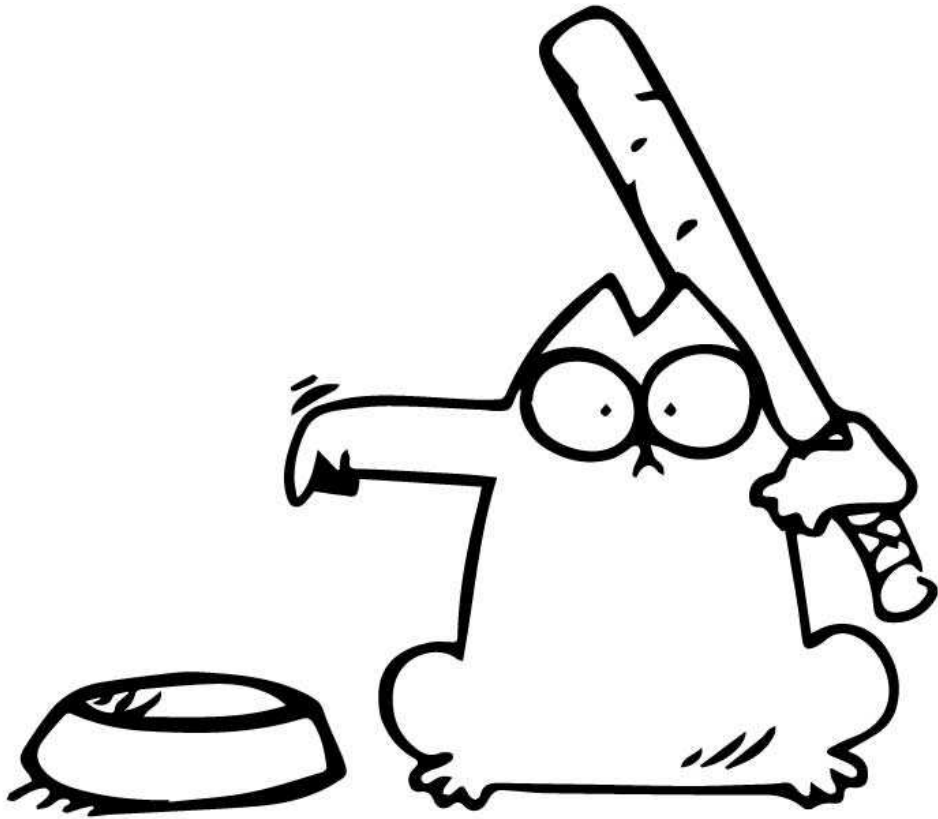
PC: [Pixabay](#)

Team Fete des Vignerons:

Lukasz Kaczmarek, Banujan Ragunathan, Andreas Hetschel and Grégory Witmer

Scenario

- Inspiration from pre-defined project cases and from the working place of project team member
- Claim process from Medical Health Insurance (MHI)
- Authenticate the customers and check the medical bills properly
- Check if the medical case refers to claimed medical bill
- Further medical investigation by the experienced Checkmedical (CM)
- Example of treatment of a patient who gets injured by his cat



What happened?

- Cats are human companions for millennia
- Approximately 1.8 million living in Swiss households
- Cat try to get revenge on his owner because he forgets often to feed him.
- Owner gets injured by falling cupboard
- It caused several faces and skin injuries
- Owner claims his medical insurance after staying in hospital

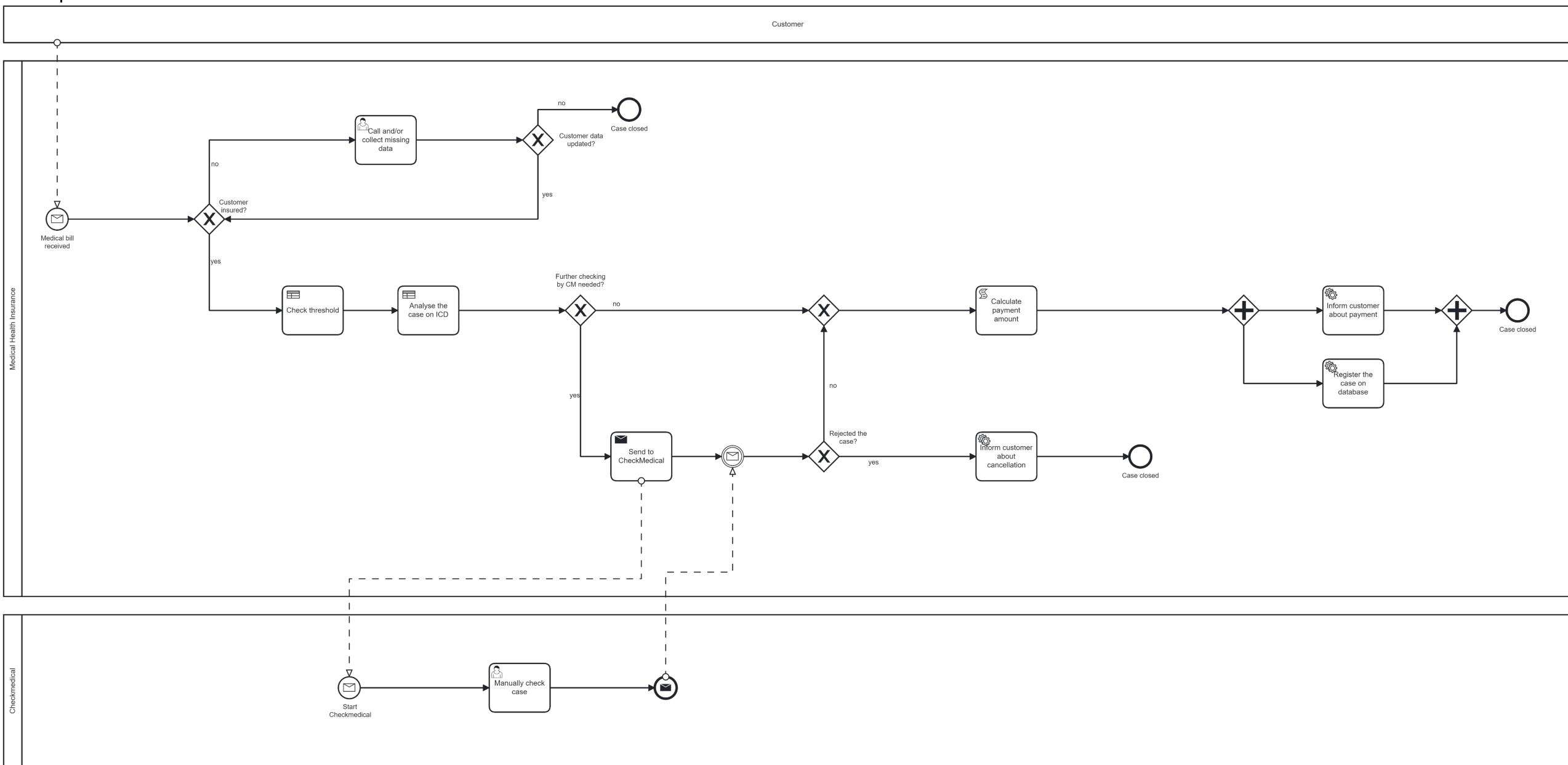


Pains of Medical Health Insurance

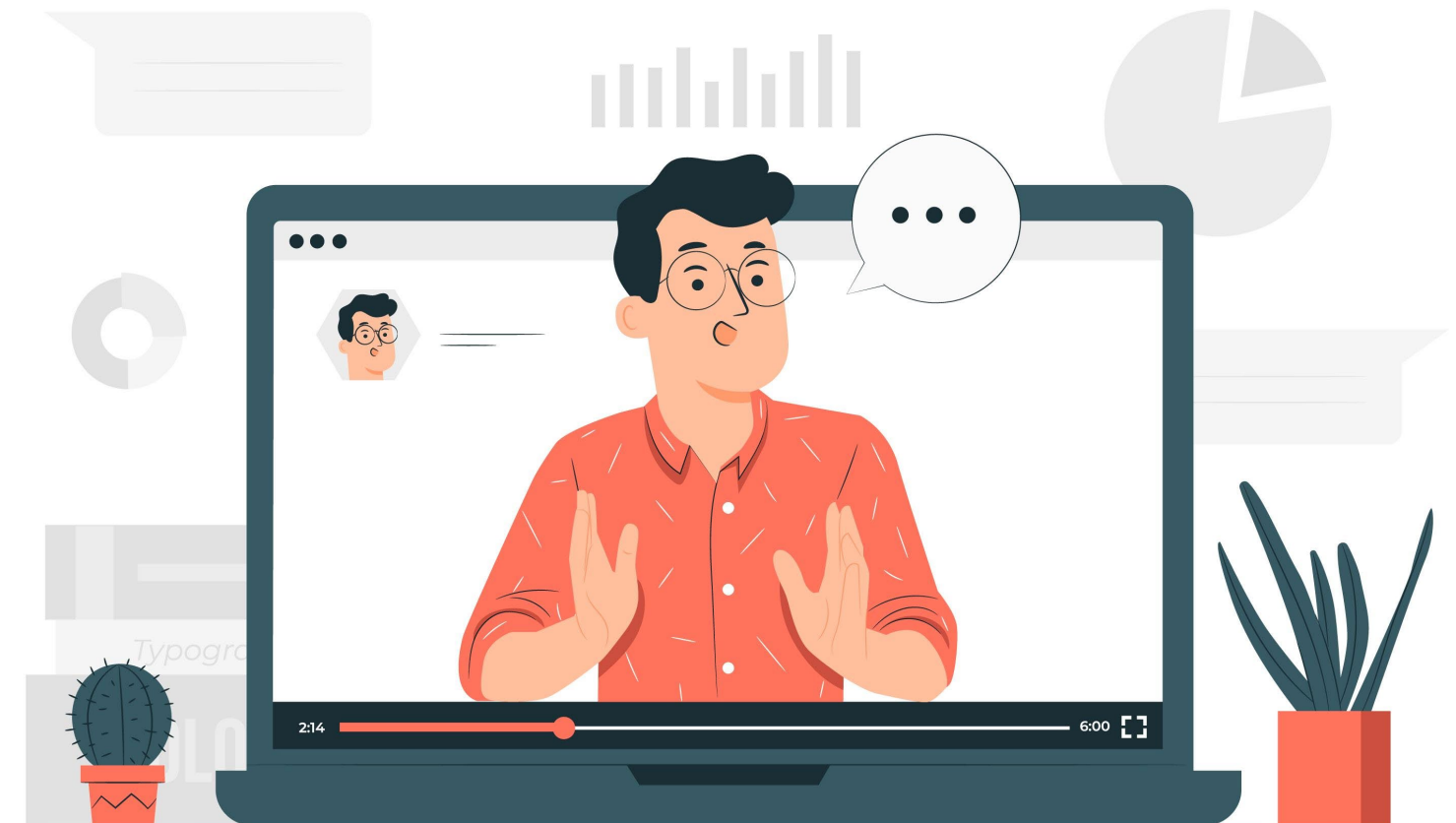
- Paperwork loaded process
- Many user tasks and manual steps
- Different lists to save information
- Non-customers try to defraud MHI Insurance
- Hospitals charge incorrect treatment with the wrong ICD and hospital stays

General Process

- Online form to add customer details and medical bill
- System check details of customer and non-registered treated as potential customers
- Calculation a percentage of the payment according to insurance type
- ICD of medical bill checked automatically
 - Mail send to Checkmedical if the ICD does not relate to the case
 - Incorrect medical bill rejected, and customer and hospital and customer will be informed
- Payment amount calculated according to insurance type and full amount
- Customer and financial department informed about the release of the payment



Demo (Video)



General Process

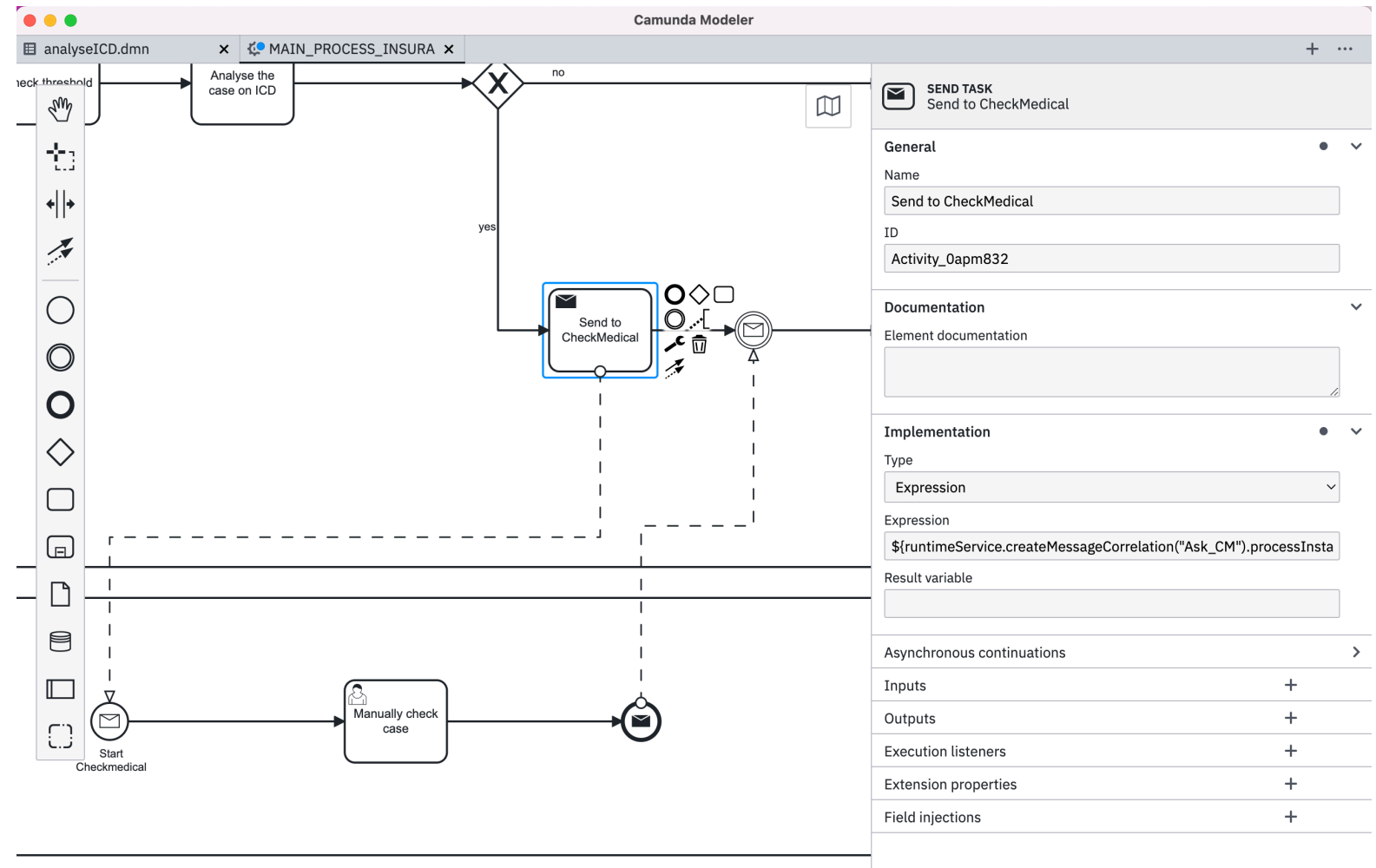
checkThreshold Hit Policy: First ▾			
	When		Then
	customerClass	+	Threshold
	string		double
1	"Basic"		0.1
2	"Classic"		0.2
3	"Middle"		0.4
4	"Advanced"		0.6
5	"Premium"		0.8
6	-		0
+	-		

- Customer policy type
- Customer percentage of payment

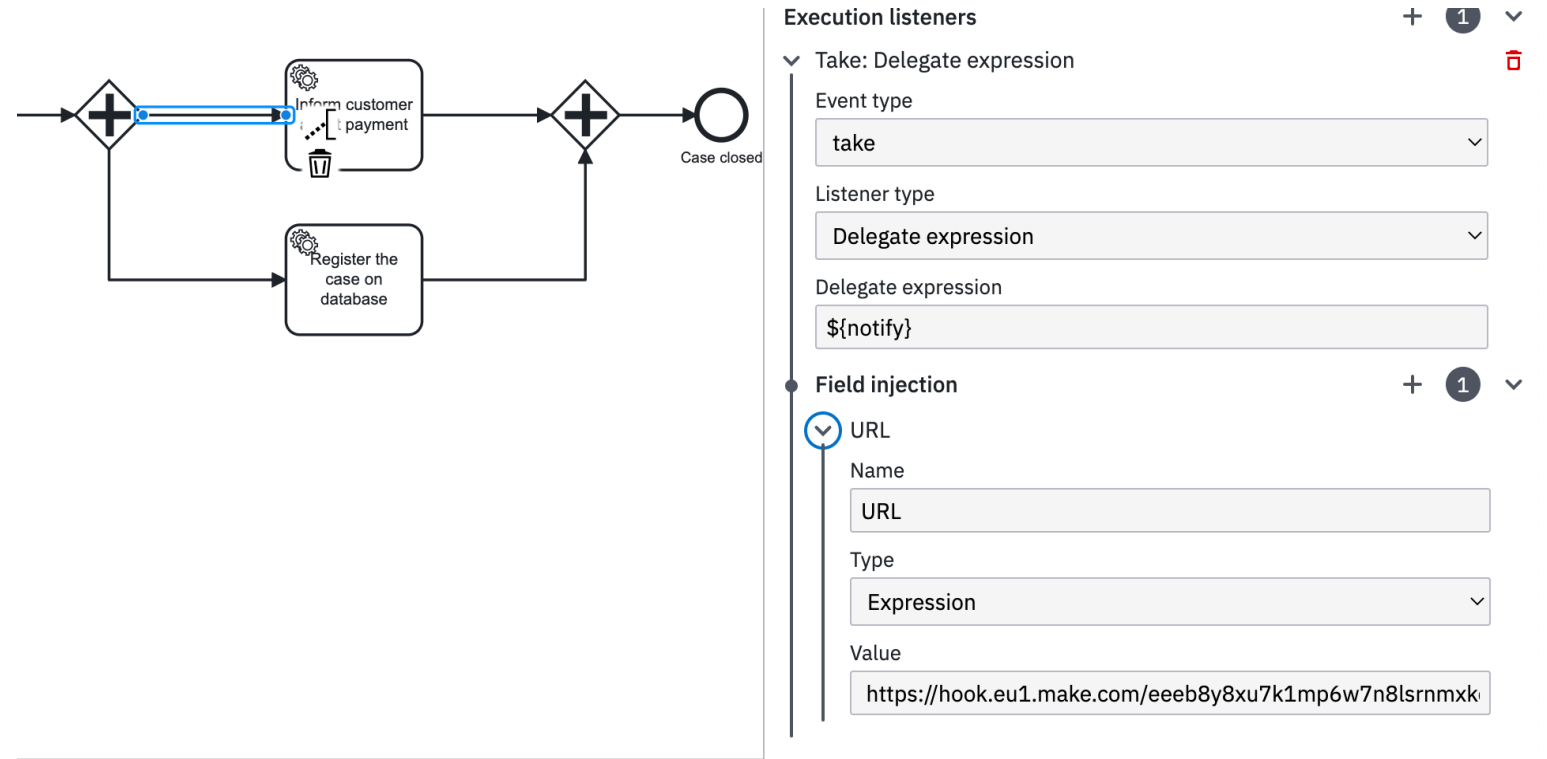
General Process

analyseICD Hit Policy: <input type="text" value="First"/>			
	When ICD CODE string	Then + Explanation string	And needsCM boolean
1	"ICD-T00.0"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
2	"ICD-T00.2"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
3	"ICD-T00.9"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
4	"ICD-T14.1"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
5	"ICD-S10.7"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
6	"ICD-S01.2"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
7	"ICD-S01.7"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
8	"ICD-S01.8"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
9	"ICD-S01.4"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
10	"ICD-J10.1"	"This ICD code corresponds to a cat bite-like incident. This bill is correct and may be payable depending on the insurance policy."	false
11	"ICD-A05.3"	"This ICD code does not refer to an incident similar to a cat bite. Please check for correctness of billing."	true
12	"ICD-A05.4"	"This ICD code does not refer to an incident similar to a cat bite. Please check for correctness of billing."	true
13	"ICD-A07.9"	"This ICD code does not refer to an incident similar to a cat bite. Please check for correctness of billing."	true
14	"ICD-A06.5"	"This ICD code does not refer to an incident similar to a cat bite. Please check for correctness of billing."	true
15	"ICD-A06.3"	"This ICD code does not refer to an incident similar to a cat bite. Please check for correctness of billing."	true
16	"ICD-A04.5"	"This ICD code does not refer to an incident similar to a cat bite. Please check for correctness of billing."	true
17	-		true

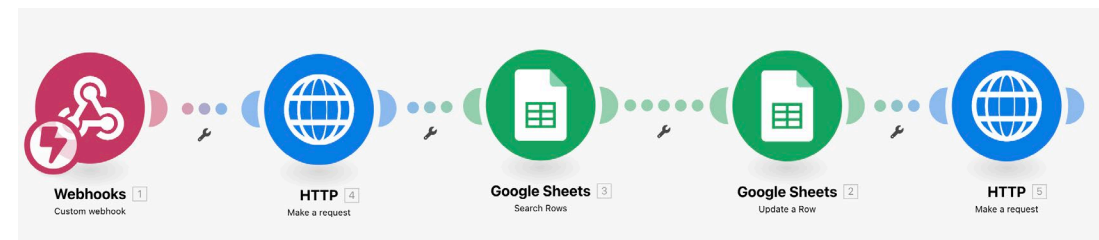
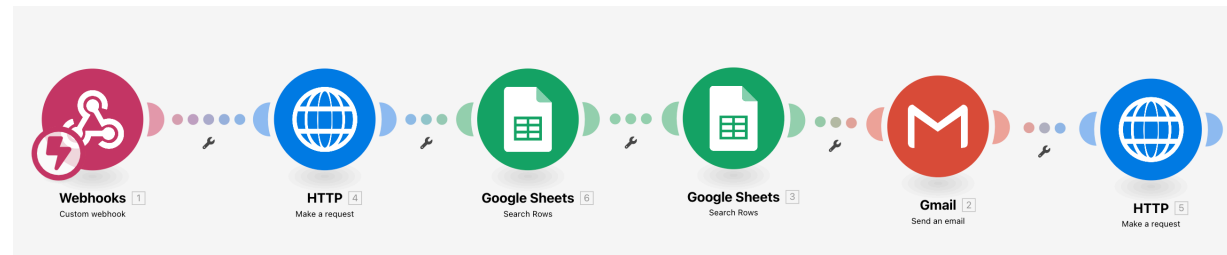
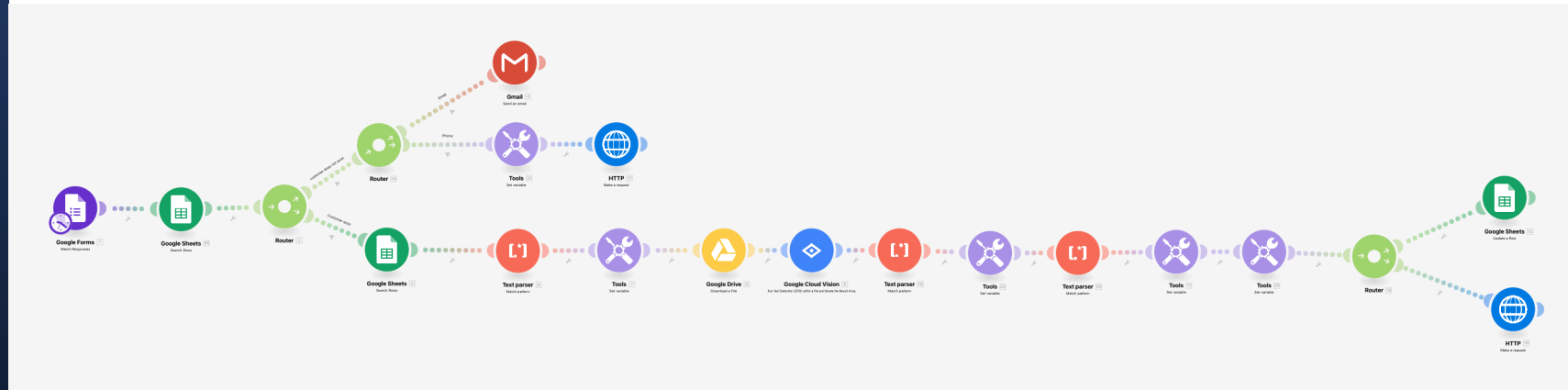
Technical Implementation (Inter-process communication)



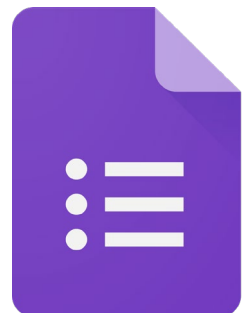
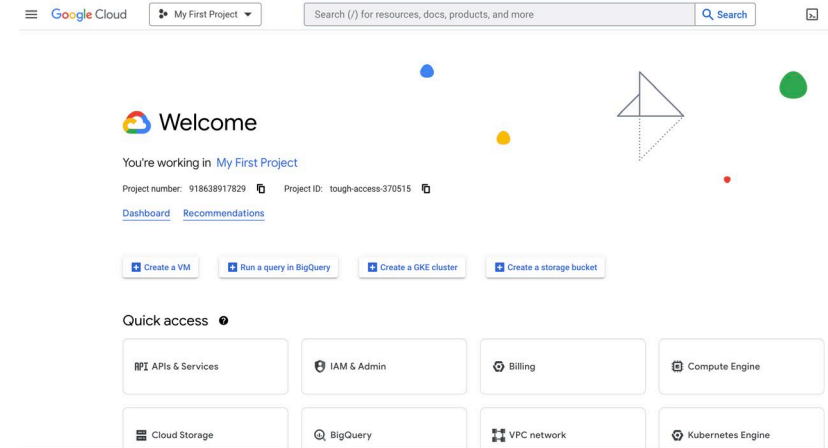
Technical Implementation (MAKE \leftrightarrow Camunda)



Technical Implementation



Technical Implementation



Gains for Medical Health Insurance

REFERRED TO CASE:

- Application form with saved information
- Authentication of Customer
- Automated check of ICD on reliability
- Automated calculation of payment amount

GENERAL POINTS:

- Time savings
- More cases handled in a short period

Outlook

- Advancement of current Digitalisation
- Involving more user tasks in automated task
- One database for all information with SQL
- Calculate the final amount by more variables
- Involve partner steps in own process

Questions



THANK YOU

from Lukasz Kaczmarek, Banujan Ragunathan, Andreas Hetschel and Grégory Witmer