TREASURER SECTION

Documents generation

Here is how the documents used by the treasurers are generated.

For the "Profits" page :

The only documents generated in this page are the invoices, called "FE".

There are **3 types** of invoices :

> _ deposit invoices ("FE d'acompte")

> _ intermediary invoices ("FE intermédiaire")

> _ final invoices ("FE de solde")

Small reminder about all the inflows related to a project, in chronological order :

> *_ Deposit ("Acompte") : 30% of the total price excl. taxes*

> *_ Deliverable n°1 : F1*

> *_ Deliverable n°2 : F2*

> *_…*

> *_Deliverable n°k (last one) : Fk (Fk includes the price of the last deliverable and the extra charges)*

k >=1

So the total price excl. taxes = F1 + F2 +… Fk

There is first one deposit invoice, then one intermediary invoice for deliverable 1 to (k-1), then one final invoice for the deliverable k. If k = 1, there is no intermediary invoice.
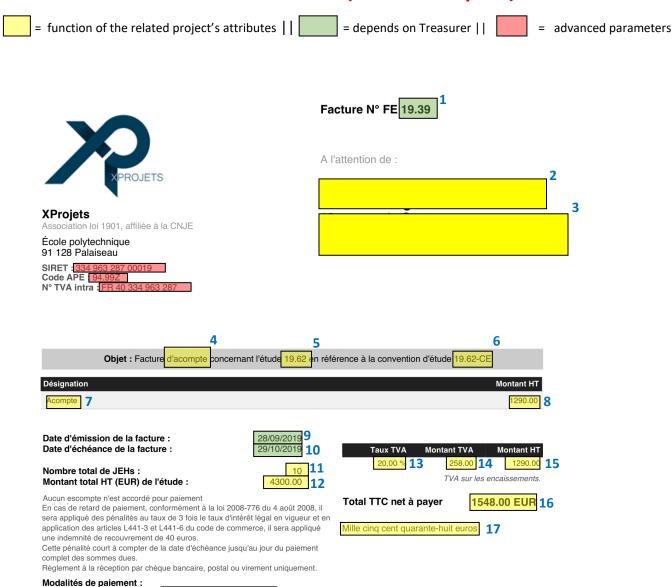
Since there is a deposit of 30%, the amount excl. taxes of the invoice corresponding to the deliverable n°j = 0.7*Fj

*The price **incl. taxes** indicated on the invoice n°j :*

> *_0.7* Fk * 1.2 if the client is french (TVA rate = 20%)*

> *_ 0.7*Fk if the client is non-french (same as excl. taxes)*

DEPOSIT INVOICE ("FE d'acompte")

□ = function of the related project's attributes || □ = depends on Treasurer || □ = advanced parameters

Facture N° FE 19.39 **1**

A l'attention de :

2

3

XProjets
Association loi 1901, affiliée à la CNJE

École polytechnique
91 128 Palaiseau
SIRET : 334 963 287 00019
Code APE : 94.99Z
N° TVA intra : FR 40 334 963 287

Objet : Facture d'acompte **4** concernant l'étude 19.62 **5** en référence à la convention d'étude 19.62-CE **6**

Désignation	Montant HT
Acompte **7**	1290.00 **8**

Date d'émission de la facture : 28/09/2019 **9**
Date d'échéance de la facture : 29/10/2019 **10**

Nombre total de JEHs : 10 **11**
Montant total HT (EUR) de l'étude : 4300.00 **12**

Taux TVA	Montant TVA	Montant HT
20,00 % **13**	258.00 **14**	1290.00 **15**

TVA sur les encaissements.

Total TTC net à payer 1548.00 EUR **16**

Mille cinq cent quarante-huit euros **17**

Aucun escompte n'est accordé pour paiement
En cas de retard de paiement, conformément à la loi 2008-776 du 4 août 2008, il sera appliqué des pénalités au taux de 3 fois le taux d'intérêt légal en vigueur et en application des articles L441-3 et L441-6 du code de commerce, il sera appliqué une indemnité de recouvrement de 40 euros.
Cette pénalité court à compter de la date d'échéance jusqu'au jour du paiement complet des sommes dues.
Règlement à la réception par chèque bancaire, postal ou virement uniquement.

Modalités de paiement :
Pour les versements   RIB : 30004 00086 00010114402 68

merci d'indiquer votre nom   Domiciliation : BNP Paribas
et numéro de facture   IBAN : FR76 3000 4000 8600 0101 1440 268
                                 BIC : BNPAFRPPMAS

Pour les chèques   A l'ordre de XProjets

Paula Charles, Trésorière

Pour un règlement par chèque, nous vous remercions d'envoyer votre règlement accompagné du papillon à l'adresse :
XProjets, École polytechnique 91 128 Palaiseau

Client : **2** - FE 19.39 **1** - **Net à payer :** 1548.00 EUR **16**

Inputs that are **attributes of the related project** :

- ➢ *string(YY.int)* **num_project** (number of the project. Example : 21.01 for the first project of 2021)
- ➢ *string* **invoice_type** ("d'acompte", "intermédiaire" or "de solde", depending on the progress of the project). Here**, invoice_type** = "d'acompte" since this is the template for deposit invoices.
- ➢ *int* **nb_jeh** (total number of JEHs of the project)
- ➢ *float* **priceHT** (total price excl. taxes)
- ➢ float **priceTTC (**total price incl. taxes)
- ➢ *string* **name_client** (name of the client)
- ➢ *string* **address_client** (address of the client)
- ➢ *string* **TVA_rate** (20% if French client, 0% otherwise)

Inputs that come **from the Treasurer** :

- ➢ *string(YY.int)* **invoice_number** (all invoices are sorted by date of dispatch like follows : YY.num)
- ➢ *DD/MM/YY* **sending_date** (date when the Treasurer reviews and sends the invoice)

Now here are the formula for all the outputs in the invoice :

1 = YY.num   (example : 21.01 for the first invoice of 2021)

2 = name_client

3 = address_client

4 = invoice_type ("d'acompte" here since we are dealing with deposit invoices)

5 = num_project

6 = num_project + "-CE"

7 = "Acompte" (known since we are dealing with deposit invoices here)

8 = 0.3*priceHT

9 = sending_date

10 = sending_date + 1 month

11 = nbJEH

12 = priceHT

13 = TVA_rate

14 = TVA_rate * 0.3 * priceHT

15 = 0.3 * priceHT

16 = 0.3 * priceHT * (1 + TVA_rate)

17 = 0.3 * priceHT * (1+ TVA_rate) in full letters in french (so it is a string)

INTERMEDIARY INVOICE ("Facture Intermédiaire")

☐ = function of the related project's attributes || ☐ = depends on Treasurer || ☐ = advanced parameters

Facture N° FE `19.48` **1**

A l'attention de :

`2`

`3`

XProjets
Association loi 1901, affiliée à la CNJE

École polytechnique
91 128 Palaiseau
SIRET : `334 963 287 00019`
Code APE : `94.99Z`
N° TVA intra : `FR 40 334 963 287`

Objet : Facture `intermédiaire` **4** concernant l'étude `19.34` **5** en référence à la convention d'étude `19.34-CE` **6**

Désignation	Montant HT
Développement de ☐ `Citadelle` **7**	`5600.00` **8**

(7') **(8')**

Date d'émission de la facture : `10/12/2019` **9**
Date d'échéance de la facture : `10/01/2020` **10**

Taux TVA	Montant TVA	Montant HT	
`20,00 %` **13**	`1120.00` **14**	`5600.00` **15**	

TVA sur les encaissements.

Nombre total de JEHs : `30` **11**
Montant total HT (EUR) de l'étude : `5600.00` **12**

Total TTC net à payer `6720.00 EUR` **16**

`Six mille sept cent vingt euros` **17**

Aucun escompte n'est accordé pour paiement
En cas de retard de paiement, conformément à la loi 2008-776 du 4 août 2008, il sera appliqué des pénalités au taux de 3 fois le taux d'intérêt légal en vigueur et en application des articles L441-3 et L441-6 du code de commerce, il sera appliqué une indemnité de recouvrement de 40 euros.
Cette pénalité court à compter de la date d'échéance jusqu'au jour du paiement complet des sommes dues.
Règlement à la réception par chèque bancaire, postal ou virement uniquement.

Modalités de paiement :
Pour les versements   RIB : `30004 00086 00010114402 68`

merci d'indiquer votre nom   Domiciliation : `BNP Paribas`
et numéro de facture   IBAN : `FR76 3000 4000 8600 0101 1440 268`
                                                BIC : `BNPAFRPPMAS`

`Paula Charles, Trésorière`

Pour les chèques   A l'ordre de XProjets

Pour un règlement par chèque, nous vous remercions d'envoyer votre règlement accompagné du papillon à l'adresse :
XProjets, École polytechnique 91 128 Palaiseau

Client : `2` - **FE** `19.48` **1** - **Net à payer** `6720.00 EUR` **16**

Inputs that are **attributes of the related project**:

➢ *string(YY.int)* **num_project** (number of the project. Example : 21.01 for the first project of 2021)

➢ *string* **invoice_type** ("d'acompte", "intermédiaire" or "de solde", depending on the progress of the project). Here, **invoice_type** = "intermédiaire.

➢ *int* **nb_jeh** (total number of JEHs of the project)

➢ *float* **priceHT** (total price excl. taxes)

➢ float **priceTTC** (total price incl. taxes)

➢ *(string * float) list* **Phases** (list of the **phases related to this invoice**, with their corresponding price excl. taxes). In the example above, Phases = [("Développement de Citadelle", 5600.00)]. In the "Désignation" array above, there is one row for each element in **Phases.** So here there is only one row, but it must be possible to have several ones (let's say up to 10). It is possible to reduce font size if necessary.

➢ *float* **invoice_amountHT** (the amount of this invoice. Simply equals to the 0.7 * the sum of Phases[k][1] with k between 0 and (length(Phases)-1). **IMPORTANT** : On the example above, there was no account, so the amount HT is 5600 and not 0.7*5600. With the ERP, we would like to always have an account, so each invoice amountHT will be diminished of 30%. This substraction must appear on the invoice, so that the client sees it. For example, you can add this line in the "Désignation" array, just under the last phase. It could be presented just like a phase, with a name "Acompte" and a negative value of -0.3*(sum of the phases prices). That way, the invoice_amountHT would be equal to the sum of the prices written in "Désignation".

➢ *string* **name_client** (name of the client)

➢ *string* **address_client** (address of the client)

➢ *string* **TVA_rate** (20% if French client, 0% otherwise)

Inputs that come **from the Treasurer** :

➢ *string(YY.int)* **invoice_number** (all invoices are sorted by date of dispatch like follows : YY.num)

➢ *DD/MM/YY* **send_date** (date when the Treasurer reviews and sends the invoice)

Now here are the formula for all the outputs in the invoice :

1 = YY.num   (example : 21.01 for the first invoice of 2021)

2 = name_client

3 = address_client

4 = invoice_type ("intermédiaire" here since we are dealing with the intermediary invoices)

5 = num_project

6 = num_project + "-CE"

7 = Phases[0][0]   (name of the first phase, which is the only one here).

8 = Phases[0][1]   (prixe excl. taxes of the first phase).

If there are more than one phase (so length(Phases) >=2), the other rows are logically filled the same way. In the example above, if there were 2 phases for example, we would have 7' = Phases[1][0] and 8' = Phases[1][1]

9 = send_date

10 = send_date + 1 month

11 = nbJEH

12 = priceHT (WARNING here we have priceHT = invoice_amountHT, but this is a **coincidence**).

13 = TVA_rate

14 = TVA_rate * invoice_amountHT

15 = invoice_amountHT

16 = invoice_amountHT * (1 + TVA_rate)

17 = invoice_amountHT * (1+ TVA_rate**)   in full letters** in french (so it is a string)

FINAL INVOICE ("Facture de solde")

As we saw, final invoices are just like intermediary invoices, but there are the last one. So the generation is almost the same. The only differences is that:

➢ **invoice_type** = "de solde"

For the "expenses" page:

3 type of documents are generated in this section :

_ **Bulletin de Versement (or BV),** when we give money to the students who did the missions

_ **Note de Frais (NDF)** When a member of XProjets have paid for the firm and wants to be reimbursed. For that he has to fill some information and to upload the corresponding invoice on the ERP.

_ **Facture (FAC)** All the other expenses. We receive an invoice from a supplier.

NOTE DE FRAIS

 = function of the information filled by the member || = depends on Treasurer || = advanced parameters

XProjets

Association régie par la loi 1901, affiliée à la CNJE

Ecole Polytechnique, Route de Saclay, 91120 Palaiseau

[SIRET : 334 963 287 00019 · Code APE : 94.99Z · N°URSSAF : 910 120168408001011 10 · N° TVA intracom. : FR40 334 963 287]

Note de frais N°19.18   **1**

NOM :	Kobanda	**2**
PRENOM :	Anthony	**3**
DATE :	18/12/2019	**4**
MOTIF DE LA NOTE DE FRAIS :	Carte de vœux Noël	**5**

N°*	Désignation	Montant HT	TYPE TVA	TVA (20%)	TVA (10%)	TVA (5,5%)	Montant TTC	
1	Carte de vœux	66,76	20,0%	13,36	0		80,12	**6**
2	Enveloppes	1,02	20,0%	0,2	0	0	1,22	**7**
	TOTAL	67,78		13,56			81,34 €	
		8		**9**			**10**	

Le demandeur,	L'approbateur (resp de pôle),	La Trésorière,
Anthony Kobanda **11**	Théophile Denys de Bonnaventure	Paula Charles

Inputs coming from the member who asks for the NDF :

➢ *string* **name_member**   (the name of the member)

➢ *string* **motif**   (reason for the expense)

➢ The member basically fills by hand the array called "Désignation.
He can enter as many rows as he wishes, and provides 3 inputs per
row : *string* name, *float* montant HT, and TVA (which is 20, 10, or
5.5 %). The last entry (called Montant TTC) can be automatically
calculated with montantHT*(1+TVA). The total prices at the
bottom of the array are also automatically filled.

➢ DD/MM/YY **request_date** when the member asks for the NDF

Inputs coming from the treasurer :

➢ *YY.int* **NDF_num**   each NDF are given a number by date of
creation. 21.02 for the second NDF of 2021.

1 = NDF_num

2 = member last name

3 = member first name

4 = request_date

5 = motif

6 = first line filled by the member

7 = second line filled by the member (….as many lines as the member wants)

8 = sum of the above

9 = sum of the above

10 = sum of the above

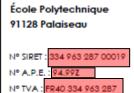**11 = first name + last name**

BULLETIN DE VERSEMENT

= function of the related project's attributes || ☐ = depends on Treasurer || ☐ = advanced parameters

Bulletin de Versement

XPROJETS
Junior-Entreprise - École Polytechnique

1 N° 20.08
2 12/03/2020

Xprojets
École Polytechnique
91128 Palaiseau

N° SIRET : 334 963 287 00019
N° A.P.E. : 94.99Z
N° TVA : FR40 334 963 287

3 Cyril Voisard

4 Blvd des Maréchaux

91120 Palaiseau

5 N°SS : 1 97 05 78 158 231 34

N° étude : 19.55 **6**
Ref du RDM : 19.55-RDM.01 **7**
Type de travail : Intervenant

Rémunération brute : 520.00 **9**
Nombre de jours-étude : 2 **10**
Base U.R.S.S.A.F. : 40.6
Assiette de cotisations : 81.2 **12**

COTISATIONS ET CONTRIBUTIONS SOCIALES	BASE	Part Junior		Part Étudiant	
		TAUX	MONTANT	TAUX	MONTANT
SANTE					
Sécurité sociale - Maladie Maternité Invalidité Décès	81.2	13.00%	10.56	0.00%	0.00
ACCIDENTS DU TRAVAIL - MALADIES PROFESSIONNELLES	81.2	1.30%	1.06		
RETRAITE	**12**		**13**		**14**
Sécurité sociale plafonnée TA	81.2	8.55%	6.94	6.90%	5.60
Sécurité sociale déplafonnée	81.2	1.90%	1.54	0.40%	0.32
FAMILLE	81.2	5.25%	4.26		
ASSURANCE CHÔMAGE	520.00 **9**	4.20%	21.84	0.00%	0.00
AUTRES CONTRIBUTIONS DUES PAR LA JUNIOR	81.2	0.416%	0.34		
CSG déductible de l'impôt sur le revenu	**12** 81.2			6.80%	5.52
CSG/CRDS non déductibles de l'impôt sur le revenu	81.2			2.90%	2.35
EXONERATIONS DE COTISATIONS JUNIOR					0
TOTAL DES COTISATIONS DUES (indexées sur l'assiette de cotisation)		30.12%	24.45	17.00%	13.80
TOTAL DES COTISATIONS DUES (indexées sur la rémunération brute)		4.20%	21.84	0.00%	- €

TOTAL DES COTISATIONS part Junior		46.54
TOTAL DES COTISATIONS part étudiant		13.80
TOTAL DES COTISATIONS part Junior + part étudiant		60.34

Rémunération Brute		520.00 **9**
Total Retenues étudiant		13.80
MONTANT NET PAYE EN EUROS		506.20
dont évolution de la rémunération liée à la suppression des cotisations chômage et maladie		11.71
Allègement de cotisations Junior		0,00
Montant net imposable (net + C.S.G. Non déd)		508.55

Inputs that are **attributes of the related project**:

➢ *string(YY.int)* **num_project** (number of the project. Example : 21.01 for the first project of 2021)

➢ *int* **nb_jeh_interveningstudent** (number of JEHs worked by this intervening student on the project)

➢ *string* **name_interveningstudent** (name of the intervening student)

➢ *string* **address_interveningstudent** (address of the intervening student)

➢ *int* **socialinsurancenb_interveningstudent** (social insurance number of the intervening student)

➢ *string(***num_project***-RDM.int)* **num_RDM_interveningstudent** (RDM « récapitulatif de mission » number of the intervening student). Every individual making money on the project will have a RDM. (Ex : first interv. stud. 20.03-RDM.01 second interv. stud. 20.03-RDM.02).

Inputs that come **from the Treasurer** :

➢ *string(YY.int)* **bv_number** (all bvs are sorted by date of dispatch like follows : YY.num)

➢ *DD/MM/YY* **payment_date** (date when the Treasurer reviews and pays the intervening student)

Now here are the formula for all the outputs in the invoice :

1 = YY.num   (example : 21.01 for the first BV of 2021)

2 = payment_date

3 = name_interveningstudent

4 = address_interveningstudent

5 = socialinsurancenb_interveningstudent

6 = num_project

7 = num_RDM_interveningstudent

9 = nb_jeh_interveningstudent * 260

10 = nb_jeh_interveningstudent

12 = nb_jeh_interveningstudent * advanced parameter just above (in red)

13 = input (in yellow) * advanced parameter (in red) (by line)

14 = input (in yellow) * advanced parameter (in red) (by line)

For all other fields, it's just simple formulas which you can get in the BV template.