Final Project

Introduction

In this project I am trying to modal verb suffixation in Portuguese for both regular and irregular verbs. I chose this topic because I enjoyed the morphology and suffixation unit of Linguistics. I thought of morphology program we did with Caribbean Spanish. Since most examples done in class have been done using Spanish (native Spanish speaker), I went with a similar language I can understand which is Portuguese. One of the things I noticed about the Portuguese language was it had morphology/suffixation rules like Spanish, but different to ones we had covered in class.

In the portuguese language 'eu' translates to 'I', 'tu' translates to 'you', 'ele/ela' translates to 'him/she', 'nós' translates to 'us', 'vós' translates to 'you', and 'eles/elas' translates to 'they'. Typically, Portuguese verbs follow one one of these suffixation patterns dependent on their conjugation:

Person	Indicative						Subjunctive		Future subj. or
	Present	Preterite	Imperfect	Pluperfect	Future	Conditional	Present	Imperfect	personal infin.
eu	-0	-ei	-ava	-ara	-arei	-aria	-е	-asse	-ar
	-0	-i	-ia	-era	-erei	-eria	-а	-esse	-er
	-0	-i	-ia	-ira	-irei	-iria	-а	-isse	-ir
tu	-as	-aste	-avas	-aras	-arás	-arias	-es	-asses	-ares
	-es	-este	-ias	-eras	-erás	-erias	-as	-esses	-eres
	-es	-iste	-ias	-iras	-irás	-irias	-as	-isses	-ires
ele/ela	-а	-ou	-ava	-ara	-ará	-aria	-е	-asse	-ar
	-е	-eu	-ia	-era	-erá	-eria	-а	-esse	-er
	-е	-iu	-ia	-ira	-irá	-iria	-а	-isse	-ir
nós	-amos -emos -imos	-ámos ^{EP} /- amos ^{BP} -emos -imos	-ávamos -íamos -íamos	-áramos -êramos -íramos	-	-aríamos -eríamos -iríamos	-emos -amos -amos	-ássemos -êssemos -íssemos	
vós	-ais	-astes	-áveis	-áreis	-areis	-aríeis	-eis	-ásseis	-ardes
	-eis	-estes	-íeis	-êreis	-ereis	-eríeis	-ais	-êsseis	-erdes
	-is	-istes	-íeis	-íreis	-ireis	-iríeis	-ais	-ísseis	-irdes
eles/elas	-am	-aram	-avam	-aram	-arão	-ariam	-em	-assem	-arem
	-em	-eram	-iam	-eram	-erão	-eriam	-am	-essem	-erem
	-em	-iram	-iam	-iram	-irão	-iriam	-am	-issem	-irem

An example of this form of suffixation can be seen with the word 'cantar' which mean 'to sing'.

The chart below indicates how the verb changes to one of the following suffixations.

number	person	Indicative mood						
		Present	Preterite	Imperfect	Pluperfect	Future		
singular	1st	cant o	cantei	cantava	cant ara	cantarei		
	2nd	cantas	cantaste	cantavas	cantaras	cantar ás		
	3rd	cant a	cant ou	cantava	cantara	cantar á		
plural	1st	cantamos	cant ámos ^{EP} cant amos ^{BP}	cant ávamos	cant áramos	cantaremos		
	2nd	cantais	cantastes	cantáveis	cant áreis	cantareis		
	3rd	cantam	cant aram	cantavam	cant aram	cantar ão		

Similarly, we can see this in 'comer' the Portuguese word for 'to eat.'

number	person	Indicative mood						
		Present	Preterite	Imperfect	Pluperfect	Future		
singular	1st	com o	comi	comia	comera	comer ei		
	2nd	comes	comeste	comias	comeras	comerás		
	3rd	come	comeu	comia	comera	comer á		
plural	1st	comemos	comemos	comíamos	com êramos	comeremos		
	2nd	comeis	comestes	comíeis	com êreis	comereis		
	3rd	comem	comeram	comiam	com eram	comerão		

Unlike the regular verbs like 'comer' and 'cantar' seen above, irregular verbs do not follow typical suffixation patterns when there is a change in conjugation. For instance, the word 'ser' means 'to be' and does not follow a regular pattern as seen below.

number	person	Indicative mood						
		Present	Preterite	Imperfect	Pluperfect	Future		
singular	1st	estou	estiv e	est ava	estiv era	estar ei		
	2nd	estás	estiv este	estavas	estiv eras	estar ás		
	3rd	está	esteve	est ava	estiv era	estar á		
plural	1st	est amos	estiv emos	est ávamos	estiv éramos	estar emos		
	2nd	est ais	estiv estes	est áveis	estiv éreis	estar eis		
	3rd	estão	estiv eram	est avam	estiv eram	estar ão		

The verb 'estar' also means 'to be', however is typically different than 'ser' because 'estar' is more temporary and 'ser' is permanent. Like 'ser' estar is an irregular verb that does not follow the typical suffixation patterns as shown below.

number	person	Indicative mood					
		Present	Preterite	Imperfect	Pluperfect	Future	
singular	1st	sou	fui	era	fora	ser ei	
	2nd	és	foste	eras	foras	ser ás	
	3rd	é	foi	era	fora	ser á	
plural	1st	somos	fomos	éramos	fôramos	seremos	
	2nd	sois	fostes	éreis	fôreis	ser eis	
	3rd	são	foram	eram	foram	ser ão	

However irregular verbs in Portuguese do not follow a common pattern like shown in the regular verbs. Instead their suffixation can vary like shown in the following examples of the verbs

Implementation

In this project, I included 2 regular verbs and 2 irregular verbs with their suffixation. When running the program, it will return the verbs and their suffixation dependent on the conjugation. Everything works as intended I tried making everything as simple as possible. To run the program one can run:

portuguese(Verb, Determiner, Type, Number, Person, Mood, Return).

My program is principle because when dealing with regular verbs I changed the last 2 letters and used morphology to provide the proper suffocation of the verb. Alternatively, irregular verbs are completely replaced with their proper suffixation.