Creating the electronic reading assistant tool for the Dama Diwan language.

Of course, the ideal is to learn the Dama Language (http://linguifex.com/wiki/Dama_Diwan) without any electronic device: the whole list of the 258 words and the 6 suffixes can easily be contained on one page of A4 size paper which may be consulted at any time.

2 electronic glossing tools already exist in:

http://lingojam.com/Damadiwan for quick reminding the meaning of all word forms.
http://lingojam.com/tolearnDamaDiwanwords for full dictionary entries.

What is missing is only a tool that can offer glosses on-mouse-over, together with the ability to recognise Dama words written in different ways.

A good example for such a tool is http://www.unilang.org/jara.php which is simply a box with a header and a footer;

the header text should be "Write or paste Dama text here:", and the footer text "Parse through reading assistant", after which a message should appear: "(Move the mouse cursor over the words)". By moving the cursor over each word, the word should be analysed into its stem and suffix, and a gloss should be given for the stem, for the suffix, and for the whole word. This is a simple process, as each word has one of the six suffixes: o, on, a, an, e, en (with the exception of the 6 indeclinable words: a, i, o, an, in, un).

More important for the reading assistant tool is to recognise the Dama words written in different ways:

If words are written as in the dictionary database, there should be no change; however, if they are written differently, the machine should give the word, preceded by an asterisk (*) and written in the 10 digit system of writing Dama (http://linguifex.com/wiki/Dama_Diwan#Writing_system).

For example, if the input word is "tiso", the machine simply glosses it, because this is the entry form in the dictionary database; but if the word is input as "teso", or tesu, disu, tisu, deso, desu, the machine should present the word as *7150 before giving the gloss.

How will the machine transform different given forms into the 10 digit system?

This is resolved according to this grid:

I / i / E / e / J / j	=	1
N / n	=	2
M / m	=	3
A / a	=	4
S / s	=	5
b / B / p / P	=	6
T / t / D / d	=	7
R / r	=	8
g / G / K / k	=	9
O / o / U / u / W / w / F / f / V / v	=	0
H / h	=	–
X / x	=	–
c / l / q / y / z / C / L / Q / Y / Z	=	?
(any other letters or characters)	=	!

This is the whole basic function of the reading assistant tool.

If it is possible to include some **advanced** functions, these should be:

1) if a word is recognised as a 4 or 5 letter Dama word augmented by a "*4" (i.e. letter "a") after its first letter, the machine should present as follows, with example of "woko" / "*0090":
If the machine finds a word "waoko", or any word reduced to 04090, it should present:
: "colour / similarity / appearance of: *0090 / woko = citrus fruit".

2) if a word is recognised as an x Dama word with one of its vowels doubled or tripled, e.g. *600 (boo, from bo), *011100 (wiiiwo, from wiwo), *74800 (taroo, from taro), or as a Dama word

with its first "*4" (a) doubled or tripled with some additional mark or irrecognizable letter after the first "a", then it should present:

"big / very big x" (in case the word's first or only vowel is doubled / tripled, respectively);

"small / very small x" (in case the word's second vowel is doubled / tripled, respectively).

Example: wiiiwo =*011100 =very big *wiwo =water;

boo =big *bo =work, feat.

taroo =*74800 =small *taro =animal.

ba'ako = 64'490 =big *bako =body.

ma'aato =34'4470very big *mato =time.

3) if a word is recognised as a Dama word with one (or two) missing *0, the machine should reconstruct the full form with the missing *0(s), e.g. if the text reads "kro", the machine should supply *9080 (kuro), and if the text has ks, the machine should restore it to *9050 (kuso).

4) Random text generator:

this function should give a text of four (or user-defined number) pieces, each piece being what can be gotten by once pressing the F9 button in http://users.sch.gr/ioakenanid/dama%20diwan.xls.