Visual Tagging Tool (VTT)



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Introduction

- A simple, easy, lightweight, portable, Java Swing based annotation tool
- Shows tagged text in different visual effects: color, font, size, bold, *italic*, <u>underline</u>, etc.
- Developed to ease the human tagging process (markup text)
- Can be integrated with other NLP programs
- Full documents & supports
- Free distributed with open source code (since 2009)

Basic Steps to Use VTT?

- 1) Open a plain unmarked text
 - Vtt -> Open (O)
- 2) Define or import tags
 - Tags -> Setup
 - Tags -> Setup -> Import
- 3) Start to markup (assign tag to plain text)
 - Select text: smear, double clicks, triple clicks, quick keys, etc.
 - Assign tag: quick keys, pull-down menu



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Text – Open (Cont.)

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Vtt Text Tags Markups Options Help

This study has investigated the relationship between duodenogastric reflux, gastritis and certain symptoms 6-12 months after three operations for uncomplicated duodenal ulcer. The operations studied were proximal qastric vagotomy (PGV, 20 cases), truncal vagotomy and pyloroplasty (TV+P, 22 cases) and truncal vagotomy and antrectomy (TV+A, 21 cases). Duodenogastric reflux was assessed both by a radiological technique and by measuring the concentration of bilirubin in the gastric aspirate before and after operation. Incidence and severity of postoperative qastritis were determined by endoscopic biopsy. Symptoms were assessed by symptomatic score and Visick grading. There was a significant correlation between duodenal reflux and histological evidence of both severe superficial qastritis and qlandular atrophy (P less than 0-01). There was also a close association between the degree of reflux and the presence of severe heartburn, epigastric pain and bile vomiting after operation. The amount of reflux did not differ before operation. There was significantly less reflux following PGV than after either TV+P (P less than 0-025) or TV+A (P less than 0-001). The results indicate that an operation which preserves an innervated and intact antrum and pylorus will protect against postoperative duodenogastric reflux, gastritis and symptoms.

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Text - Options

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Markups – Select Text

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Vtt Text Tags Markups Options Help

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<u> Markups - Assign a Tag</u>

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Vtt Text Tags Markups Options Help

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<u> Markups – More Features</u>

- Delete selected markup (0)
- Assign a tag by quick keys (1~9)
- Markup redo (r) /undo (u)
- Markups join (j)
- Markups movement control by keys
- Selected Markup Information (m)

Markups – Informations

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<u>Markups – Movement</u>

• Markups related

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r	Redo markup operation				
u	Undo markup operation				
0	Delete selected markup				
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Other Options

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Ok

VTT – File Format

- Meta Data
 - Default tag file (3 fields)
 - History (4 fields)
- Text Content
 - Original plain text

• Tags Configuration (14 fields)

- Name and category
- Bold, italic, underline, display, font family, font size
- Foreground and background colors (RGB)
- Markups Information (6 fields)
 - Offset and length
 - Assign tag (name and category)
 - Annotation and tagged text

File Format – Meta Data

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File Edit Format View Help

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File Format – Tags

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VTT – Example



VTT – Integration

- Use VTT file format for the NLP applications
- Integrate with words/terms tokenizer (text tools) to generate pre-tokenized VTT files for less key strokes
- Read in VTT files and apply evaluation software:
 - File level
 - Corpus level

Visual Tagging Tool (VTT)



http://SPECIALIST.nlm.nih.gov/vtt

Questions



- Lexical Systems Group: http://umlslex.nlm.nih.gov
- The SPECIALIST NLP Tools: http://specialist.nlm.nih.gov