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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% fphw Assignment
% LaTeX Template
% Version 1.0 (27/04/2019)
%
% This template originates from:
% https://www.LaTeXTemplates.com
%
% Authors:
% Class by Felipe Portales-Oliva (f.portales.oliva@gmail.com) with template
% content and modifications by Vel (vel@LaTeXTemplates.com)
%
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%----------------------------------------------------------------------------------------
%	PACKAGES AND OTHER DOCUMENT CONFIGURATIONS
%----------------------------------------------------------------------------------------

\documentclass[
	12pt, % Default font size, values between 10pt-12pt are allowed
	%letterpaper, % Uncomment for US letter paper size
	%spanish, % Uncomment for Spanish
]{fphw}

% Template-specific packages
\usepackage[utf8]{inputenc} % Required for inputting international characters
\usepackage[T1]{fontenc} % Output font encoding for international characters
\usepackage{mathpazo} % Use the Palatino font

\usepackage{graphicx} % Required for including images

\usepackage{booktabs} % Required for better horizontal rules in tables

\usepackage{listings} % Required for insertion of code

\usepackage{enumerate} % To modify the enumerate environment

%----------------------------------------------------------------------------------------
%	ASSIGNMENT INFORMATION
%----------------------------------------------------------------------------------------
```

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\title{Deliverable \#2} % Assignment title

\author{Karamveer Kaur} % Student name

\date{July 29th,2019} % Due date

\institute{University of Concordia} % Institute or school name

\class{SOEN6011} % Course or class name

\professor{Dr. Pankaj Kamthan} % Professor or teacher in charge of the assignment

%----------------------------------------------------------------------------------------

\begin{document}

\maketitle % Output the assignment title, created automatically using the information in the custom commands above

%----------------------------------------------------------------------------------------
%	ASSIGNMENT CONTENT
%----------------------------------------------------------------------------------------

\section*{Question 1}

\begin{problem}
	Which type of user interface is used?
\end{problem}
\begin{center}
\includegraphics[width=0.5\columnwidth]{snapshot3.png} % e image
\end{center}
%----------------------------------------------

\subsection*{Answer}

Graphical

%----------------------------------------------------------------------------------------

\section*{Question 2}

\begin{problem}
```

Which debugger has been used ?
\end{problem}
\begin{center}
\includegraphics[width=0.5\columnwidth]{snapshot4.png} % e image
\end{center}
%---

\subsection*{Answer}
Troubleshooting a method for recognizing blunders in your code by executing the code. We can check the accuracy of the code variable by factor. For our task we have utilized the in-assembled Debugger from Eclipse IDE.

%---

\section*{Question 3}

\begin{problem}
What are the advantages of using this debugger?
\end{problem}

%---

\subsection*{Answer}
 \begin{enumerate}
	\item
	Debuggers can do specially appointed review or modification of factors, code, or some other part of the runtime condition, while manual investigating requires to stop, alter, and re-execute the application (potentially requiring recompilation.

	\item
	It made simpler to check the code due to the recognition of the IDE with the language information and The debugger associates with the libraries utilized.

	\item
	Debuggers offer numerous approaches to lessen the time and tedious work to do practically any investigating undertakings.

	\item
	Coding,recompiling and updating everything in same window using the IDE debugger makes it simpler for the software engineer.
	\end{enumerate}
%---

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\section*{Question 4}

\begin{problem}
Disadvatages of JDT debugger:

\end{problem}

%---------------------------------------------

\subsection*{Answer}
  \begin{enumerate}
        \item
        Investigating different code ways simultaneously not yields the turnaround with a debugger.

        \item
        It is anything but difficult to lose direction in the multi-threaded haze when the debugger's breakpoints are being hit in one string at point A and a totally discrete string at point B.
    \end{enumerate}
  \begin{enumerate}
%-----------------------------------------------------------------------------------------

\section*{Question 5}

\begin{problem}
Endeavors in accomplishing the Quality Attributes:
\end{problem}

%---------------------------------------------

\subsection*{Answer}
\item
        \textbf{Correctness}
 \begin{enumerate}
    \item Application is tested thoroughly.
    \item Junit test cases are also written to check the correctness.
    \item Also performed acceptance testing by fellow colleagues.
 \end{enumerate}
\item
   \textbf{Efficiency}
      \item Using Version Control on Git Repository.
\item
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   \textbf{Robustness}
   \item Use of proper error handling mechanism to cope with errors during execution to
maintain application robustness
\item
   \textbf{Usability}
   \item User friendly interface to access the functionality of application.
\item
   \textbf{Maintainability}
   \item It's easy to maintain application using Git version control.
   \item If proper versions of the application are maintained then its easy to revert back to
previous versions.
\end{enumerate}

%---------------------------------------------------------------------------------------
\section*{Question 6}

\begin{problem}
Checkstyle Description, advantages and disadvantages
\end{problem}
\begin{center}
\includegraphics[width=0.5\columnwidth]{snapshot2.png} % e image
\end{center}
%---------------------------------------------------------------------------------------
\subsection*{Brief description}

\begin{enumerate}
Checkstyle is an improvement instrument to enable software engineers to compose Java code
that holds fast to a coding standard. It robotizes the way toward checking Java code to save
people of this exhausting (yet significant) task. This makes it perfect for undertakings that need
to implement a coding standard
\end{enumerate}

%---------------------------------------------------------------------------------------
\subsection*{Advantages}

\begin{enumerate}
        \item
        The programming style received by a product advancement venture can guarantee that
the code agrees to great programming rehearses which improves the quality, meaningfulness,
re-convenience of the code and may decrease the expense of improvement.

        \item
```

Such instruments accompany readymade decides that help in keeping up code guidelines.

\item
Checkstyle is profoundly configurable and can be made to help practically any coding standard.
\end{enumerate}

%--
\subsection*{Disadvantages}

\begin{enumerate}
\item
The checks performed by Checkstyle are basically constrained to the introduction of the code while rightness or fulfillment of the code is not affirmed.
\item
There's almost no documentation on the internals of code audit instruments, and not many instructional exercises tell the best way to make custom checks.
\end{enumerate}
%--
\section{References}

\begin{enumerate}[(\itshape a\normalfont)] % Sub-questions styled as italic letters
\item
https://en.m.wikipedia.org/wiki/Checkstyle (60%)

\item
https://stackoverflow.com/questions/426569/why-is-debugging-better-in-an-ide (45%)

\item
https://github.com/kranonit/calculator-unit-test-example-java (30%)

\item
http://functions.wolfram.com/ (75%)

\item
https://www.latextemplates.com/ (45%)

\item
https://ieeexplore.ieee.org/document/8559686 (10%)
\end{enumerate}

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\section{Repository Address}
\begin{enumerate}
https://github.com/karamveer28/soen-6011-project
\end{enumerate}

\end{document}