

### § Template Documentation §

## Section 1: Basic Information of This Template Class

Despite this *SEU-ML-Assign* class is dedicated to Southeast University as the Machine Learning assignment LaTeX template both for teachers and students, it can also be used for other schools. In the near future, it will eventually become an elegant template for all assignment requirements.

<b>Package Class Name</b>	<code>seu-ml-assign</code>
<b>Version</b>	1.1 (2022/03/28)
<b>Description</b>	LaTeX Template for Southeast University Machine Learning Assignment
<b>Author</b>	Teddy van Jerry (Wuqiong Zhao)
<b>Maintainer</b>	Teddy van Jerry (Wuqiong Zhao)
<b>GitHub Repository</b>	<a href="https://tvj.one/ml-tex">https://tvj.one/ml-tex</a>
<b>Issues</b>	<a href="https://tvj.one/ml-tex/issues">https://tvj.one/ml-tex/issues</a>
<b>CTAN Package</b>	<a href="https://www.ctan.org/pkg/seu-ml-assign">https://www.ctan.org/pkg/seu-ml-assign</a>
<b>Information Page</b>	<a href="https://seu-ml-assign.github.io">https://seu-ml-assign.github.io</a>
<b>Open Source License</b>	MIT License ( <a href="https://tvj.one/ml-tex/blob/master/LICENSE">https://tvj.one/ml-tex/blob/master/LICENSE</a> )

You can contact me at [me@tvj.one](mailto:me@tvj.one) for support.

## Section 2: Class Options

To use this template, put `seu-ml-assign.cls` file under the same directory with your main `tex` file.

```
\documentclass{seu-ml-assign} % SEU Machine Learning Assignment Template
```

The page size is A4 paper. There are 8 supported options:

Option	Description	Default
<code>solution</code>	Write solutions (for students).	•
<code>problem</code>	Write problem sets (for instructors).	
<code>oneside</code>	One-sided document.	•
<code>twoside</code>	Two-sided document.	
<code>9pt</code>	Set font size as 9 points.	
<code>10pt</code>	Set font size as 10 points.	•
<code>11pt</code>	Set font size as 11 points.	
<code>12pt</code>	Set font size as 12 points.	
<code>lang=</code>	Set the language. (English as <code>en</code> , Chinese as <code>cn</code> .)	<code>en</code>

For example, a 10pt, two-sided document for instructors to create an assignment consisting of problem sets should use

```
\documentclass[10pt,twoside,problem]{seu-ml-assign} % The 10pt option can be omitted.
```

With the `twoside` option, the header will switch style every page, as is the case in this documentation. In contrast, the sample file uses the `oneside` option.

There are several differences between the `solution` mode and `problem` mode, including the preset texts on the document (for example the student name is not shown in the `problem` mode) and some properties can only be used with the `problem` mode which will be elaborated on in §3.2.

## Section 3: Document Properties

**(1) Fields** There are several fields to set. The `\mainproblem{}` can be left empty. Consider the following example used in the sample file:

<code>\title{Assignment}</code>	<code>% Document Type: assignment, quiz, etc.</code>
<code>\author{Teddy van Jerry}</code>	<code>% Your Name</code>
<code>\studentID{61520522}</code>	<code>% Your Student ID</code>
<code>\instructor{TeX - LaTeX Stack Exchange}</code>	<code>% The Name of Your Instructor</code>
<code>\date{\today}</code>	<code>% The Submission or Release Date</code>
<code>\duedate{20:00 March 21, 2022}</code>	<code>% The Time the Assignment is Due</code>
<code>\assignno{1}</code>	<code>% Assignment Number</code>
<code>\semester{SEU --- 2022 Spring}</code>	<code>% Semester</code>
<code>\mainproblem{Linear Algebra}</code>	<code>% The Main Problem or Topic</code>

With these fields set, you can use the command `\maketitle` to print the title. At the same time, the metadata for the PDF document is automatically set.

**(2) Problem Mode Only Properties** One of the fields `\author{}` and `\instructor{}` can be omitted or set as empty provided that they are the same.

## Section 4: Section Title (Problem) Settings

**(1) Normal Title** The title of a problem can be set as `\problem{This is a Section Title}` or uses a lower level command `\section{This is a Section Title}`. There are two slight different between these two ways.

- The name in the table of contents (ToC) using `\problem{}` will add the section/problem number before the section/problem title name.
- The optional argument of `\section{}` will set the name in the ToC which is by default in L<sup>A</sup>T<sub>E</sub>X in the format of `\section[<ToC Name>]{<Section Title Name>}`. By contrast, the optional argument in `\problem{}` sets the problem points as is detailed in §4.3.

`\section[\thesection~<Title>]{<Title>}` is equivalent to `\problem{<Title>}` or `\problem[] {<Title>}`.

**(2) Unnumbered Title** Use the `\section*{}` or `\problem*{}` to get an unnumbered section.

### This is an Unnumbered Problem

This title will also not appear in the ToC or bookmarks of the PDF.

**(3) Problem with Points** The points of a problem can be set using command `\problempts{xxx}` before calling the `\section{}` command. These two commands can be simplified to `\problem[xxx]{}`. For example, using the command `\problem[15]{This is a Problem Worth 15 Points}` will have:<sup>1</sup>

### Problem 1: This is a Problem Worth 15 Points

(15 points)

Note that if the point is an empty string, the point information will not be shown.

<sup>1</sup>This title is actually faked in this documentation because I do not want the ToC of this documentation contaminated. But it will look the same.

(4) **Long Title Compatibility** There is also no problem if the section title is too long.<sup>2</sup>

## Problem 2: I Don't Think that Anyone Will Enjoy Themselves Seeing a Very Very Long Problem That is Worth Twenty Points in this Machine Learning Course

(20 points)

(5) **Section Title Name** The name of the section (default name as `problem`) can be changed by using `\renewcommand{\sectionheadname}{Name}`.

(6) **Section Number** The number of the section can be changed, for example `\texttt{\setproblem{4}}` will make the next section number be 5. For experienced L<sup>A</sup>T<sub>E</sub>X users to understand, this command actually change the section counter.

(7) **Solution Declaration** You can use `\startsolution` to declare you start writing the solution. This will reset the section number and it is especially useful when your document contains problems and solutions as two separate parts. There is an option `print` and if you use `\startsolution[print]` you will get:

## SOLUTION

and the word `SOLUTION` can be changed using command `\renewcommand{\solutionname}{Other Name}`.

## Section 5: Subsection Title (Sub Problem) Settings

(1) **Normal Title** This is a normal title using command `\subproblem{Normal Title}` or alternatively the command `\subsection{Normal Title}`. There is a slight difference between these two commands which is similar to the case stated in §4.1. The command `\subproblem{}` adds the sub problem number in ToC and bookmarks. `\subsection[(\arabic{subsection}) <Title>]{<Title>}` is equivalent to `\subproblem{<Title>}`.

(2) Use `\subproblem{}` or `\subsection{}` if only the sub problem number is required (like this line).

(3) **Subsection Number** Similar to `\setproblem{}`, there is also `\setsubproblem{}`.

(4) **Subsubsection (Sub Sub Problem)** For completeness, `\subsubsection{}` and `\subsubproblem{}` are provided. One example is §6.5.1, where `\subsubsection[(\arabic{subsubsection}) <Title>]{<Title>}` is equivalent to `\subsubproblem{<Title>}`.

## Section 6: Other Tools

(1) **Equation Numbering** The equation number is within the section (problem), for example

$$\det(\mathbf{A}) = 1 \times \begin{vmatrix} -5 & 3 \\ -6 & 4 \end{vmatrix} - (-3) \times \begin{vmatrix} 3 & 3 \\ 6 & 4 \end{vmatrix} + 3 \times \begin{vmatrix} 3 & -5 \\ 6 & -6 \end{vmatrix} = 1 \times (-2) + 3 \times (-6) + 3 \times 12 = 16, \quad (6.1)$$

which uses the `equation` environment and can be referenced using the command `\eqref{eq:xxx}` with a corresponding `\label{eq:xxx}` in Eq. (6.1).

(2) **Maths Packages** Maths Package `mathtools`, `amssymb`, `amsthm`, `bm` and `nicematrix` are automatically loaded. The `nicematrix` package is especially powerful in terms of writing a matrix. You can find its documentation at <https://ctan.org/pkg/nicematrix>. It is worth noting that `nccmath` can lead to potential subsection (sub problem) title indentation problem and therefore should not be loaded.

<sup>2</sup>This title is also faked.



```
\begin{notice}{This is a Notice Box}
  Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin viverra massa
  ↳ rutrum felis vulputate, ac faucibus velit accumsan. Vivamus aliquet felis nec
  ↳ interdum sollicitudin. Nullam ornare eu velit id cursus. Maecenas a sodales
  ↳ velit, vel cursus magna. Cras lobortis venenatis.
\end{notice}
```

## Appendix A: Known Issues

- The section title background height may not be accurate;

If you find more issues, please report them on <https://tvj.one/ml-tex/issues>.

## Appendix B: Change Log

### v1.1 2022/03/28 – Bug Fix and Enhancement

1. Add `\mainproblem{}` command;
2. Add `\subsubproblem{}` command;
3. Add `\hint{}` shortcut;
4. Support for `\section*{}`, `\problem*{}`, `\subsection*{}` and `\subproblem*{}`;
5. Fix ToC/Bookmarks problem;

6. Set footnote line style;

7. Add the `twoside` option.

### v1.0 2022/03/19 – Initial Version

1. Initial `cls` file in addition to a sample file and documentation;
2. Publish at GitHub and CTAN.

## Appendix C: Source Code

The source code of `seu-ml-assign.cls` is listed below.

```
15 \NeedsTeXFormat{LaTeX2e}
16 \ProvidesClass{seu-ml-assign}[2022/03/28 SEU Machine Learning Assignment Template]
17
18 %% Class and Options
19 \RequirePackage{xkeyval}
20 \def\@@ptsize{10pt} % font size
21 \DeclareOptionX{9pt}{\def\@@ptsize{9pt}}
22 \DeclareOptionX{10pt}{\def\@@ptsize{10pt}}
23 \DeclareOptionX{11pt}{\def\@@ptsize{11pt}}
24 \DeclareOptionX{12pt}{\def\@@ptsize{12pt}}
25 \def\@@solutionmode{1} % default as the solution mode
26 \DeclareOptionX{solution}{\def\@@solutionmode{1}} % solution mode
27 \DeclareOptionX{problem}{\def\@@solutionmode{0}} % problem mode
28 \def\@twoside{0} % default as oneside
29 \DeclareOptionX{oneside}{\def\@twoside{0}} % one-side document
30 \DeclareOptionX{twoside}{\def\@twoside{1}} % two-side document
31 \def\@lang@en{en} % English
32 \def\@lang@cn{cn} % Chinese
33 \def\@lang{\@lang@en} % default as English (en)
34 \DeclareOptionX{lang}{\def\@lang{#1}}
35 \DeclareOptionX*{\PackageWarning{lang}{'\CurrentOption' ignored}}% For unknown
  ↳ options
36 \ProcessOptionsX\relax
37 \LoadClass[a4paper, onecolumn, \@@ptsize]{article}
38
```

```

39 %% Page Settings
40 \RequirePackage[inner=2.0cm,outer=2.0cm,top=1.2cm,bottom=3.5cm]{geometry}
41 \newcommand{\firstfooteradditionalheight}{2em} % additional height for footer on the
    ↪ first page
42 \hfuzz=.5em % disable false positive of overfull \hbox
43
44 %% Default Names
45 \def\@course@default{Machine Learning}
46
47 %% Language Settings
48 \ifx
49   \@@lang\@@lang@cn\RequirePackage{ctex}
50   \def\@course@default{}
51 \fi
52
53 %% Document Properties
54 \global\let\@course\@course@default
55 \global\let\@assignno\@empty
56 \global\let\@semester\@empty
57 \global\let\@studentID\@empty
58 \global\let\@instructor\@empty
59 \global\let\@duedate\@empty
60 \global\let\@author\@empty
61 \global\let\@mainproblem\@empty
62 \global\let\@mainproblem\@empty
63 \newcommand{\@course}[1]{\gdef\@course{#1}} % Assignment Number
64 \newcommand{\@assignno}[1]{\gdef\@assignno{#1}} % Assignment Number
65 \newcommand{\@semester}[1]{\gdef\@semester{#1}} % Semester
66 \newcommand{\@studentID}[1]{\gdef\@studentID{#1}} % Student ID
67 \newcommand{\@instructor}[1]{\gdef\@instructor{#1}} % Instructor
68 \newcommand{\@duedate}[1]{\gdef\@duedate{#1}} % Due Date of the Assignment
69 \newcommand{\@mainproblem}[1]{\gdef\@mainproblem{#1}} % The main problem of the
    ↪ assignment
70
71 %% Fonts and Colors
72 \RequirePackage[T1]{fontenc}
73 \RequirePackage[usenames,dvipsnames,table]{xcolor}
74
75 %% TikZ Rule
76 \RequirePackage{tikz}
77 \usetikzlibrary{fadings,calc}
78 \newcommand{\tikzrule}[3][\tikz{\fill[#1] (0,0) rectangle (#2,#3);}]
79
80 %% Sections Settings
81 \RequirePackage[explicit]{titlesec} % explained in
    ↪ https://tex.stackexchange.com/a/292307/234654
82 \RequirePackage{suffix}
83 % http://mirrors.ctan.org/macros/latex/contrib/titlesec/titlesec.pdf
84 \pgfdeclarelayer{background}
85 \pgfsetlayers{background,main}
86 \global\let\@problempts\@empty
87 \newcommand{\@problempts}[1]{\gdef\@problempts{#1}} % Points of the Problem
88 \newcommand{\@problemptsprint}{\ifx\@problempts\@empty\else(\@problempts~points)\fi}
89 \newcommand{\@sectionheadname}{Problem} % Name for the Section (default as 'Problem')
90 % Reference: https://tex.stackexchange.com/a/12269/234654
91 \newcommand{\boxedsection}[4][blue!20]{%
92   \begin{tikzpicture}[inner sep=0pt, inner ysep=0.3ex]
93     \node[anchor=base west] at (0,0) (counter) {#2};
94     \path let \p1 = (counter.base east) in node[anchor=base west, text
    ↪ width={\textwidth-\x1-#4}] (content)
95       at ($ (counter.base east)+(#4,0)$) {#3};
96     \begin{pgfonlayer}{background}
97       \shade[left color=#1,right color=white] let \p1=(counter.north),
    ↪ \p2=(content.north) in

```

```

98         (0,{max(\y1,\y2)}) rectangle (content.south east);
99     \end{pgfonlayer}
100 \end{tikzpicture}
101 }}
102 % For numbered section, i.e. \section{}
103 \titleformat{\section}% <command>
104     {\Large\bfseries}% <format>
105     {}% <label>
106     {0pt}% <sep>
107     {\boxedsection{\sectionheadname{} \thesection:}{#1}{0.33em}}% <before-code>
108     [%
109         \vspace{-2.2\baselineskip}\hfill{\normalfont\small\problemptsprint}%
110         \problempts{}% clear the problem points
111     ]% <after-code>
112 % For unnumbered section, i.e. \section*{}
113 \titleformat{name=\section,numberless}% <command>
114     {\Large\bfseries}% <format>
115     {}% <label>
116     {0pt}% <sep>
117     {\boxedsection{}{#1}{0em}}% <before-code>
118     [%
119         \vspace{-2.2\baselineskip}\hfill{\normalfont\small\problemptsprint}%
120         \problempts{}% clear the problem points
121     ]% <after-code>
122 \newcommand{\setproblem}[1]{\ifx#1@empty\else\setcounter{section}{#1}\fi} % force
    ↪ the number of problem
123 \newcommand{\setsubproblem}[1]{\ifx#1@empty\else\setcounter{subsection}{#1}\fi} %
    ↪ force the number of subproblem
124 \newcommand{\problem}[2][\problempts{#1}\section[\thesection~#2]{#2}]%
125 \WithSuffix\newcommand\problem*[2][\problempts{#1}\section*{#2}]%
126 \newcommand{\solutionname}{Solution}%
127 \newcommand{\startsolution}[1][print]{%
128     \setproblem{0}% reset the section counter
129     \def\startsolutionprintoption{print}
130     \def\startsolutionprintuseroption{#1}
131     \ifx\startsolutionprintuseroption\startsolutionprintoption{%
132         {%
133             \fontfamily{LinuxLibertineT-OsF}\selectfont% select font as Linux
134             ↪ Libertine
135             \centering\LARGE\scshape%
136             \vspace{\baselineskip}%
137             \solutionname{}\[-0.2em]%
138         }%
139         \noindent%
140         \tikzrule[WildStrawberry, path fading=west]{.5\textwidth}{.2em}%
141         \tikzrule[WildStrawberry, path fading=east]{.5\textwidth}{.2em}%
142     }\fi%
143 }
144 \titlespacing*{\section}{0em}{2.5\baselineskip}{1\baselineskip}
145 \titleformat{\subsection}[runin]{\large\bfseries}{(\arabic{subsection})}{0.33em}{#1}
146 \WithSuffix\newcommand\subproblem*[1]{\subsection*{#1}}
147 \titleformat{\subsubsection}[runin]{\bfseries}{\arabic{subsubsection}.}{0.33em}{#1}
148 \newcommand{\subsubproblem}[1]{\subsubsection[\arabic{subsubsection}.]{#1}}
149 \WithSuffix\newcommand\subsubproblem*[1]{\subsubsubsection*{#1}}
150
151 %% Maths Settings
152 \RequirePackage{mathtools}
153 \RequirePackage{amssymb}
154 \RequirePackage{amsthm} % proof environment and others
155 \RequirePackage{bm} % \bm command
156 \RequirePackage{nicematrix}
157 \numberwithin{equation}{section}
158 \newtheorem{theorem}{Theorem}[section]

```



```

159 \newtheorem{proposition}{Proposition}[section]
160 \newtheorem{lemma}{Lemma}[section]
161 \newtheorem{corollary}{Corollary}[section]
162 \newcommand{\hintstyle}{\itshape}
163 \newcommand{\hint}[1]{(\hintstyle Hint: #1)}
164 \DeclareMathOperator*{\argmin}{\arg\min}
165 \DeclareMathOperator*{\argmax}{\arg\max}
166
167 %% Code Block Settings
168 \RequirePackage{listings}
169 \definecolor{dkgreen}{rgb}{0,0.5,0}
170 \definecolor{gray}{rgb}{0.5,0.5,0.5}
171 \definecolor{mauve}{rgb}{0.58,0,0.82}
172 \lstset{
173     numbers=left,
174     frame=tb,
175     aboveskip=3mm,
176     belowskip=3mm,
177     showstringspaces=false,
178     columns=fixed,
179     framerule=1pt,
180     rulecolor=\color{gray!35},
181     backgroundcolor=\color{gray!5},
182     basicstyle=\ttfamily\small,
183     numberstyle=\footnotesize\color{gray},
184     keywordstyle=\bfseries\color{MidnightBlue!95!black},
185     commentstyle=\color{dkgreen},
186     stringstyle=\color{mauve},
187     breaklines=true,
188     breakatwhitespace=true,
189     tabsize=2,
190     extendedchars=false,
191     postbreak=\mbox{\hspace{-1.4em}\textcolor{purple}{\hookrightarrow}}\space}
192 }
193
194 %% Captions Settings
195 \RequirePackage[font=footnotesize,labelfont=bf]{caption}
196
197 %% Color Boxes
198 \RequirePackage[many]{tcolorbox}
199 \RequirePackage{varwidth}
200 \newtcolorbox{fancybox}[2][{enhanced,skin=enhancedlast jigsaw,
201     attach boxed title to top left={xshift=-4mm,yshift=-0.5mm},
202     fonttitle=\bfseries\sffamily,varwidth boxed title=0.7\linewidth,
203     colbacktitle=blue!45!white,colframe=red!50!black,
204     interior style={top color=blue!10!white,bottom color=red!10!white},
205     boxed title style={empty,arc=0pt,outer arc=0pt,boxrule=0pt},
206     underlay boxed title={
207         \fill[blue!45!white] (title.north west) -- (title.north east)
208         -- +(\tcboxedtitleheight-1mm,-\tcboxedtitleheight+1mm)
209         -- ([xshift=4mm,yshift=0.5mm]frame.north east) -- +(0mm,-1mm)
210         -- (title.south west) -- cycle;
211         \fill[blue!45!white!50!black] ([yshift=-0.5mm]frame.north west)
212         -- +(-0.4,0) -- +(0,-0.3) -- cycle;
213         \fill[blue!45!white!50!black] ([yshift=-0.5mm]frame.north east)
214         -- +(0,-0.3) -- +(0.4,0) -- cycle; },
215     title={#2},#1
216 }
217 \newtcolorbox{notice}[2][{enhanced,
218     colframe=blue!50!black,colback=blue!10!white,colbacktitle=blue!5!yellow!10!white,
219     fonttitle=\bfseries,coltitle=black,attach boxed title to top center=
220     {yshift=-0.25mm-\tcboxedtitleheight/2,yshifttext=2mm-\tcboxedtitleheight/2},
221     boxed title style={boxrule=0.5mm,
222     frame code={\path[tcb fill frame] ([xshift=-4mm]frame.west)

```



```

223 -- (frame.north west) -- (frame.north east) -- ([xshift=4mm]frame.east)
224 -- (frame.south east) -- (frame.south west) -- cycle; },
225 interior code={ \path[tcb fill interior] ([xshift=-2mm]interior.west)
226 -- (interior.north west) -- (interior.north east)
227 -- ([xshift=2mm]interior.east) -- (interior.south east) -- (interior.south west)
228 -- cycle;} },
229 title={#2},#1
230 }
231
232 %% Footnote Settings
233 \RequirePackage[bottom]{footmisc} % glue footnote to bottom
234 \renewcommand{\footnoterule}{\noindent\tikzrule[SeaGreen, path
235 ↪ fading=east]{.4\textwidth}{.1em}}
236 \renewcommand{\footnotesep}{1em}
237
238 %% Header and Footer
239 \RequirePackage{fancyhdr}
240 \RequirePackage[colorlinks=true, urlcolor=blue, linkcolor=purple, citecolor=red,
241 ↪ hypertexnames=false]{hyperref}
242 \setlength{\headheight}{52pt}
243 \setlength{\marginparwidth}{2cm}
244 \pagestyle{fancy}
245 \if\@twoside0
246 \lhead{
247 \fontfamily{LinuxLibertineT-OfF}\selectfont
248 \if\@solutionmode1
249 \textsc{\@title~\@assignno} -- \@studentID~\@author
250 \else
251 \textsc{\@course \@title~\@assignno}
252 \fi
253 }
254 \rhead{\thepage}
255 \renewcommand\headrule{\vspace{-0.7em}\tikzrule[BrickRed, path
256 ↪ fading=east]{.5\textwidth}{0.3mm}}
257 \else
258 \fancyhf{}
259 \renewcommand\headrule{%
260 \ifodd\thepage
261 \vspace{-0.7em}\tikzrule[BrickRed, path fading=east]{.5\textwidth}{0.3mm}
262 \else
263 \vspace{-0.7em}\hfill\tikzrule[BrickRed, path
264 ↪ fading=west]{.5\textwidth}{0.3mm}
265 \fi
266 }
267 \fancyhead[L0]{
268 \fontfamily{LinuxLibertineT-OfF}\selectfont
269 \if\@solutionmode1
270 \textsc{\@title~\@assignno} -- \@studentID~\@author
271 \else
272 \textsc{\@course \@title~\@assignno}
273 \fi
274 \renewcommand\headrule{\vspace{-0.7em}\tikzrule[BrickRed, path
275 ↪ fading=east]{.5\textwidth}{0.3mm}}
276 }
277 \fancyhead[RE]{
278 \fontfamily{LinuxLibertineT-OfF}\selectfont
279 \textsc{\@course \@title~\@assignno}
280 }
281 \fancyhead[LE,RO]{\thepage}
282 \fi
283 \cfoot{}
284
285 % header and footer style for the first page
286 \fancypagestyle{firstpage}{
287 \renewcommand\headrule{}

```

```

282 \lhead{}
283 \rhead{}
284 \cfoot{
285     \fontfamily{LinuxLibertineT-0sF}\selectfont
286     \vspace*{-\firstfooteradditionalheight}
287     \vspace{-1.5em}
288     \tikzrule[purple, path fading=west]{.5\textwidth}{.15em}%
289     \tikzrule[purple, path fading=east]{.5\textwidth}{.15em}
290
291     \footnotesize\centering
292     \if\@@solutionmode1
293         This \MakeLowercase{\@title{}} is due \@duedate{} and the date of
294         ↪ submission is \@date.
295     \else
296         This \MakeLowercase{\@title{}} is due \textbf{\@duedate{}} and the
297         ↪ version of the problem set is \@date.
298     \fi
299
300     % LaTeX template information
301     \LaTeX{} template for this \MakeLowercase{\@title{}} is
302     ↪ \textit{SEU-ML-Assign}
303     open source at \href{https://tvj.one/ml-tex}{tvj.one/ml-tex} under the MIT
304     ↪ License.
305     E-mail \href{mailto:me@tvj.one}{me@tvj.one} for support.
306 }
307 }
308
309 %% Title Settings
310 \RequirePackage{tabularx}
311 \RequirePackage{afterpage}
312 \newcommand{\pdftitleadditionalname}{Solution}
313 \makeatletter
314 \renewcommand\maketitle{
315
316     \if\@@solutionmode0
317         \ifx\@instructor\@empty
318             \let\@instructor\@author % author is the instructor (if not specified)
319         \else
320             \ifx\@author\@empty
321                 \let\@author\@instructor % instructor is the author (if not
322                 ↪ specified)
323             \fi
324         \fi
325     \fi
326
327     \thispagestyle{firstpage}
328     \fontfamily{LinuxLibertineT-0sF}\selectfont % set font as Linux Libertine
329     \enlargethispage{-\firstfooteradditionalheight} % make room for the footer
330     \begin{minipage}{10.5cm}
331         \centering
332         {
333             \fontsize{36}{48}\selectfont
334             \textcolor{Plum}{\scshape \@course}
335         }\\[.5em]
336         {
337             \if\@@solutionmode1
338                 \@studentID~\@author
339                 \quad
340             \fi
341             \textit{Instructor:~\@instructor}
342         }
343     \end{minipage}
344     \begin{minipage}{5cm}
345         \vspace{0.7em}

```

```

341     \centering
342     {
343         \large
344         \fontfamily{LinuxBiolinumT-OfF}\selectfont
345         \textcolor{BrickRed}{\@semester}
346     }
347
348     \LARGE\@title~{\fontfamily{bch}\selectfont\@assignno}
349 \end{minipage}
350 \[.3em]
351 \tikzrule[cyan, path fading=east]{\textwidth}{.4em}
352
353 \ifx\@mainproblem\@empty
354     \vspace{2mm}
355 \else
356     \begin{center}
357         \vspace{-1\baselineskip}\color{RoyalPurple!50!black}
358         \LARGE\@S~\@mainproblem~\@S
359     \end{center}
360 \fi
361
362 \fontfamily{cmr}\selectfont % Computer Modern
363
364 % Set up document meta data
365 % Note that it should be placed here because
366 % by now \@author and \@title have been set.
367 \hypersetup{
368     pdfauthor={\@author},
369     pdftitle={%
370         \@title~\@assignno~
371         \if\@solutionmode1
372             \pdftitleadditionalname{}
373         \fi
374         - \@course%
375     },
376     pdfsubject={\@course},
377     pdfkeywords={%
378         \@course, \@title%
379         \ifx\@mainproblem\@empty\else%
380             , \@mainproblem%
381         \fi%
382     },
383     pdfcreator={LaTeX with SEU-ML-Assign class},
384     pdfproducer={LaTeX}
385 }
386 }
387 \makeatother

```