

# WESTMINSTER INTERNATIONAL UNIVERSITY IN TASHKENT

## COURSEWORK SUBMISSION FORM

STUDENT USE		STAFF USE	
Module Name	Computer Science	First Marker's (acts as signature)	
Module Code	4BUIS012C-n	Second Marker's (acts as signature)	
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## **1. Introduction**

This report is aimed to provide hardware and software for new IT startup, moreover show some kind of advises for usage of programs and computers.

In the given case scenario there is a team of start up web-developers, that are considering on creation web apps and development. Concept of working process will be planned as, there is a place with server, where UI/UX designer, tester and developer will work. At same same time project

manager will have more active mode of work to communicate with clients.

Employees are need hardware and software related to style of work. Basically they will use frontend and backend software for creation applications, so UI/UX designer will work on visible part of web-sites with CSS animation and designing tools, at same time developer will work on hidden side with hosting and treatment of the given data. Project manager have to be more mobile to communicate with clients and team members. In addition it is better to work in one place, than separately.

## 2. Hardware Review

Name and Price	Computer configuration	Short description	Benefits	Limitations
Design and Prototyping				
Desktop  Price 1120\$	CPU: Intel Core i5 12400F 2.50 GHz  RAM: DDR4 16GB 3600Mhz RGB (8x2)  SSD: M2 NVMe 250GB  HDD: 1TB 7200 Rpm  GPU: RTX 3050 8GB  Monitor 2ED2421B 23.8" 75Hz IPS	Computer of UI/UX designer should be stronger than others, because all work related to graphic creation will be on it.	<ul style="list-style-type: none"> <li>• Big physical memory</li> <li>• Effective GPU</li> <li>• High quality of monitor</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to move</li> <li>• Expensive price</li> <li>• Needs electricity connection</li> </ul>

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Tester				
Desktop  Price 650\$	CPU I5-12400F  2.50GHz  RAM 12GB  GPU no need  SSD 256  Monitor AOC Value-line E2270SWN	<u>Middle PC. that allow</u>  <u>to test web apps and</u>  <u>pages.</u>	<ul style="list-style-type: none"> <li>• Optimal price</li> </ul>	<ul style="list-style-type: none"> <li>• No GPU</li> <li>• Needs electricity</li> </ul>

Project Management				
Laptop Acer A315-35-C8 3X N4500/4GB/ 1000GB Pure Silver Price 401\$	HDD 1 TB  RAM DDR4 4GB  GPU Intel UHD Graphics  CPU Intel Celeron N4500 2.8GHz	<u>Simple office laptop</u>  <u>for rooting staff.</u>  <u>organizing of projects.</u>  <u>planning and</u>  <u>committing on work</u>  <u>progress.</u>	<ul style="list-style-type: none"> <li>• Cheap</li> <li>• Light</li> <li>• Big physical storage</li> </ul>	<ul style="list-style-type: none"> <li>• No GPU</li> <li>• Lack of RAM</li> <li>• Needs Charging</li> </ul>

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Server				
AMD Epyc 7351P  Price  1100-1300\$	S SP3, Zen, 16 Core, 32 Thread, 2.4GHz, 2.9GHz Turbo, 64MB  CPU, Retail  RAM: 64 GB  Storage: 128 GB SSD and 5-10 TB SSD	<u>Excellent solution of capability and productivity.</u>	<ul style="list-style-type: none"> <li>Fast</li> <li>Allow to use any type of server (windows or Linux)</li> </ul>	<ul style="list-style-type: none"> <li>Need special requirements</li> <li>Need electricity 24/7</li> <li></li> </ul>

Server should be placed in premises with normal temperature without hot or wet conditions. More over there must be electricity 24/7 or emergency generator to keep web server working on.

Developer				
Desktop  Price 1120\$	CPU: Intel Core i5 12400F 2.50 GHz	<u>Custom PC as UI/UX designer, that allow to work with visual studio and all</u>	<ul style="list-style-type: none"> <li>Allow to use any OC</li> <li>Could be upgraded</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to move</li> <li>Expensive price</li> </ul>

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	RAM:DDR4 16GB 3600Mhz RGB (8x2)  SSD:M2 NVMe 250GB  HDD:1TB 7200 Rpm  GPU:RTX 3050 8GB  Monitor 2ED2421B 23.8"75Hz IPS	<u>instruments without</u>  <u>any issues.</u>		<ul style="list-style-type: none"> <li>Needs electricity connection</li> </ul>
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### 3. Software Review

#### 3.1 Basic

Name and Price	Minimum system requirements	Short description	Benefits	Limitations
Design and Prototyping				
<a href="#">Figma</a> <a href="#">Sketch</a> <a href="#">Canva</a>  <b>Price:</b> Free	Windows 8 or later  RAM 4GB	Simple and free software for creation UI/UX design.	<ul style="list-style-type: none"> <li>• Free</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of tools</li> </ul>

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Name and Price	Minimum system requirements	Short description	Benefits	Limitations
<b>Developer</b>				
<a href="#"><u>Figma</u></a> <a href="#"><u>Sketch</u></a> <a href="#"><u>Visual studio code</u></a> <a href="#"><u>Git Hub</u></a> <b>Price:</b> Free	Windows 8 or later  RAM 8GB  CPU i5  SSD 256GB  Internet	Some free instruments for developing back-end part of web sites and consulting with other programmers via git hub.	<ul style="list-style-type: none"> <li>• Free</li> <li>• Suitable</li> <li>• Free</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of tools</li> <li>• Huge quantity of data</li> </ul>

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Name and Price	Minimum system requirements	Short description	Benefits	Limitations
<b>Tester</b>				
<u>Bagzilla</u>  <u>Catolon</u>  <u>Testpad</u>  <b>Price:</b> Free	Windows 8 or later  CPU i5  GPU no need  RAM 4GB	The most popular tools for tester, that allow to check bags with logs of web-sites, and share it with developers	<ul style="list-style-type: none"> <li>●Cross-platform</li> <li>●Smart interface</li> </ul>	<ul style="list-style-type: none"> <li>●Some functionality not free</li> </ul>

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Name and Price	Minimum system requirements	Short description	Benefits	Limitations
<b>Project Manager</b>				
<u>Google dox</u>  <u>Fimga</u>  <u>Lucid Chart</u>  <b>Price:</b> Free	Windows 8 or later  CPU i5  GPU no need  RAM 6GB	Cross-platforming tools with convenient staff. that allow to share, control and work with each member of the team or individually.	<ul style="list-style-type: none"> <li>•Free</li> <li>•Cross-platform</li> <li>•User-friendly interface</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of tools</li> <li>• Should be paid in future</li> <li>• Short normal free period of usage</li> </ul>

### 3.2 Premium

Name and Price	Minimum system requirements	Short description	Benefits	Limitations
<b>Design and Prototyping</b>				
Adobe Photoshop CC  <b>Price:</b> USD\$599.88/year	OS Windows 10 version CPU Intel or AMD with 64 bit support*; 2 GHz or faster.  RAM : 8 GB	Premium software for UI/UX designer with plenty of different tools. that could be used in each sphere.	<ul style="list-style-type: none"> <li>• Provided learning materials</li> <li>• Plenty of tools</li> <li>• There is a support from Adobe team</li> </ul>	<ul style="list-style-type: none"> <li>• Price</li> <li>• Need to pay every month or year</li> </ul>

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Name and Price	Minimum system requirements	Short description	Benefits	Limitations
<b>Project Manager</b>				
<p>Teamwork.</p> <p><b>Price:</b> USD\$ 17.99/month</p>	<p>Windows 8 or later</p> <p>CPU i5</p> <p>GPU no need</p> <p>RAM 6GB</p>	<p>Program, that allows organization to track and commit on work progress in different stages.</p>	<ul style="list-style-type: none"> <li>• Easy to manage</li> <li>• Advanced features</li> <li>• Smart platform</li> <li>• Templates for it projects</li> </ul>	<ul style="list-style-type: none"> <li>• Need to pay every month or year</li> </ul>

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Name and Price	Minimum system requirements	Short description	Benefits	Limitations
<b>Developer</b>				
Web Storm  <b>Price:</b> USD\$ 159/year	Windows 8 or later  CPU i5  GPU no need  RAM 8GB  SSD 256GB	The smartest solution for Javascript working.	<ul style="list-style-type: none"> <li>• Show special hints.</li> <li>• Feature of debugging</li> <li>• Support for clients.</li> <li>• Price 95\$ after 3 year of usage.</li> </ul>	<ul style="list-style-type: none"> <li>• Need to pay every month or year.</li> </ul>

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Name and Price	Minimum system requirements	Short description	Benefits	Limitations
<b>Tester</b>				
Teamcity.  <b>Price:</b> USD\$ 45/month	Windows 8 or later  CPU i5  GPU no need  RAM 6GB	Special web-targeted software.	<ul style="list-style-type: none"> <li>• Free period.</li> <li>• Advanced features.</li> <li>• Cloud based</li> <li>• Real-time reporting.</li> </ul>	<ul style="list-style-type: none"> <li>• Need to pay every month or year.</li> <li>• Difficult for new users.</li> </ul>



#### **4. Justification and recommendations**

Due to type of working movement UX/UX designer have to use the most powerful computer in the team. First at all, computer should have fast CPU to calculate information about all graphic changes. Intel core I5-12400F with speed of 2.50 GHz is optimal solution, in addition in computer should be placed good physical and ram memory, that is why I chosen game based computer, it allows to work with plenty of different instruments, moreover do it fast. There are SSD M2 NVMe 250 GB for fast working during projects and HDD 1 TB to store information or other staff. As UX/UX designer will be working with graphics it necessary to use powerful graphic card as RTX 3050 8GB, that GPU will permit working with 3D objects and creation of creative designs, that impossible on lower models. Also designer will have high quality of monitor, as aim to see picture in correct colors. When it comes, to software for UI/UX design, programs should be universal for different types of work, such as text, image, animation editing. Figma, Sketch and Canva are quite similar software, after simple registration employee could use any tools, in addition there are some premium staff, that could be bought later. Also using Figma very useful for cooperation and working in team, due to in our case team consist of 5 workers it will be convenient to work in Figma because program is using cross-platform systems and cloud storage technologies, so people could work one different projects at same time. For server it needs really powerful hardware , so it will take the biggest part of companie`s budget. For premium software Adobe Creative cloud is more than enough because it will let to use a plenty of different tools. For developer I decided to use same computer as previous one just for insurance and to except any problems of working moment. For software for developer there is a visual studio, that costs nothing for basic type of work, however if developer want to make his life better just buying of subscription on web storm will save his nerves. When it comes to project management and testing software I had chosen simple lap top for project manager to increase his mobility and capability and customed desktop for tester, due to we do not want to waste pur money. Later on in review part of software it were chosen free, open source, cross-platform tools for both parties. Although basic software for project manager and tester let majority of features, that we need my

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recommendation to use premium type of software just to increase time-management of the company, that we are consulting.

## 5. Links

<https://github.com/westminster-bis/csf2022-cw1-00013245.git>

[https://docs.google.com/document/d/1SkypSjjXrrQ5KoSlwQk3X7vWHoSxDafru\\_3Y9ztGXY/edit?usp=sharing](https://docs.google.com/document/d/1SkypSjjXrrQ5KoSlwQk3X7vWHoSxDafru_3Y9ztGXY/edit?usp=sharing)

## 6. Conclusion

In case if start up just began to work it is better to use basic variant of software, that allows to use official free programs and later move on to premium type of software, however not all of them quite useful. In case of premium software it will be easy to manage with projects and moreover it will rise profit and productivity of the company. In addition working on premium software will take less time to complete tasks from client, that lets create more projects related to web sphere or something more.

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