

# Exploring Careers Through Technical Routes

## Web Development



### The Industry

Web developers design, build and maintain websites and website applications. Projects are diverse and could include creating apps for smart phones, producing e-learning materials, developing a business internal website (intranet) for in-house communications, developing an on-line business tool, helping a local charity establish a website or designing web pages to support a major advertising or PR (public relations) campaign.

Developers may test sites and applications in different browsers, fix bugs in existing projects, meet with a project team (designers, developers and staff) for updates, learn about and test new technologies or build and maintain company databases.

Web developers are required in organisations such as advertising agencies, digital/social media marketing companies, website development & design agencies and sales, marketing & public relations companies.

The Tech Partnership  
[www.thetechpartnership.com](http://www.thetechpartnership.com)

### Skills and Requirements

To become a web developer you will need excellent technical skills and a strong attention to detail. Other key skills, knowledge and attributes include:

- Advanced skills in software programming and graphics
- Good coding skills and knowledge of computer programming languages e.g. HTML
- An ability to work well under pressure always striving to meet the objectives of the client
- Creative thinking ability
- Listening skills to understand your client's needs and solve their problems
- Effective working individually, in mixed teams, with other developers, designers and/or account managers and clients
- Clear and concise communication to understand and translate client ideas or explain technical issues to a non-technical audience
- An ability to manage complex tasks within set timeframes
- A love of and willingness to keep up to date with technology

There are in excess of 90,000 web development businesses in the UK.

Source: [www.freeindex.co.uk](http://www.freeindex.co.uk)

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## Working and Learning in Web Development

### Job Roles & Progression

#### Study Programme

Computing  
Graphic Design  
Business Studies



#### Further study

BA (Hons)  
Internet Design  
Web Design  
BSc (Hons)

Web Development/with Computing  
Web Production  
FdSc

Web Design and Development  
FdA  
Web Design

Formal professional qualifications  
from Chartered Institute for IT



#### Apprenticeships

Advanced  
Web Developer

Advanced and Higher  
Software and Web Development



#### Career roles

Lead programmer  
Project leader

A senior developer can work for an agency or become self employed

Some developers diversify into roles becoming a business analyst or a technology consultant

### Calculation including problem solving

#### Tasks

1. Create a plan for developing a new app and calculate the cost for each element of the work.

2. Complete word count for different components of a web page to ensure all text is visible on the completed page.

3. Create coding variables which have time and or rate change components.

4. Measure the speed of website functions for a client whose system is not fully performing.

5. Determine the size of on screen objects by calculating the overall space available.

#### Links to GCSE Maths

1. **Number** (whole numbers - addition, subtraction, multiplication; decimals - addition and subtraction of decimals)

2. **Number** (whole numbers - addition; fractions - of amounts; decimals - multiplying)

3. **Ratio, proportion and rates of change** (time, speed)

4. **Algebra** (algebraic formulae – rearranging formulae)

5. **Geometry and measure** (2-dimensional shapes - perimeter and area shapes)

### Communication, all forms

#### Tasks

1. Speak with a client to identify the requirements for creating their new website.

2. Collect verbal feedback from clients to gauge their satisfaction at each stage of the project plan.

3. Produce a website specification brief to clarify the client's requirements and to guide the development of the detailed project plan.

4. Communicate with potential users to test usability and perceptions.

5. Write a project brief for team members to ensure they know what is expected of them and by when.

#### Links to GCSE English Language

1. **Spoken language** (listening - audience, purpose, standard English)

2. **Spoken language** (speaking and listening - audience, purpose; voice)

3. **Writing** (audience; planning - a structure, mind maps, flow chart, table; organising information - building sentences; vocabulary - use precise verbs)  
**Spelling, punctuation and grammar** (common spelling errors; punctuation)

4. **Spoken language** (speaking and listening - audience, purpose, discussion skills)

5. **Writing** (writing non fiction – a project plan; organising information; vocabulary - use precise verbs)