What are the hamstring muscles?
The hamstrings consist of three muscles at the back of the thigh. Together, these muscles are primarily responsible for the bending of the knee joint and extension of the thigh (moving the upper leg backwards). In addition to these functions the hamstring muscles work in tandem to rotate the knee and to maintain our posture by working in conjunction with the other muscles in our thigh and low back.

What is concentric and eccentric muscle performance?
A concentric muscle contraction is muscle activation that increases tension on a muscle as it shortens. Eccentric muscle contraction occurs as the muscle fibres lengthen. The muscles generate forces across joints to make them move. When the muscle on the one side of the joint is shortening (concentric contraction), the muscle on the other side is lengthening (eccentric contraction).

What do the hamstring muscles do?
In activity, the hamstring controls the bending of the knee joint and the extension of the hip. The quadriceps is a series of muscles on the front of the thigh. The hamstrings work in partnership with these muscles to coordinate the dynamic movement of the knee and hip. These muscles are therefore functioning in all walking, running and jumping movements. Much of the work undertaken by the hamstrings is in the eccentric (lengthening) phase. For muscles to function at their best in this phase the training program needs to work them to their maximum.

There are many benefits to working a muscle eccentrically including:
1) Muscles can work with much higher loads eccentrically than concentrically.
2) A greater load means a more efficient workout and faster results.
3) The muscle is being trained in the movement patterns that are being used in daily activity.

Why is eccentric hamstring training important in injury prevention?
The hamstring muscles are important in all walking, running and jumping activity as they control the activity of the hip and the knee. These muscles are at high risk of injury and to reduce that risk need to be strengthened to perform to their maximum in both the concentric and eccentric phases. This training is also important for athletes returning to sport following an injury and should be included in any rehabilitation program.

References:

Exercises are from the FIFA 11+ program available at http://f-marc.com/11plus/exercises/